CITY OF LAWNDALE
14717 Burin Avenue, Lawndale, California 90260
Phone (310) 973-3200 – www.lawndalecity.org

AGENDA OF THE LAWNDALE CITY COUNCIL REGULAR MEETING

Monday, December 4, 2023 - 6:30 p.m.
Lawndale City Hall Council Chamber
14717 Burin Avenue

Any person who wishes to address the City Council regarding any item listed on this agenda or any other matter that is within its subject matter jurisdiction is invited, but not required, to fill out a Public Meeting Speaker Card and submit it to the City Clerk prior to the oral communications portion of the meeting. The purpose of the card is to ensure that the speaker's name is correctly recorded in the meeting minutes and, where appropriate, to provide contact information for staff follow-up.

How to observe the Meeting:
To maximize public safety while still maintaining transparency and public access, members of the public can now observe the meeting in person. Members of the public are still be able to view the meeting on YouTube "Lawndale CityTV", the City Website, or Lawndale Community Cable Television on Spectrum and Frontier Channel 3.

Copies of this Agenda packet may be obtained prior to the meeting inside the Lawndale City Hall foyer or on the **City Website**. Interested parties may contact the City Clerk Department at (310) 973-3213 for clarification regarding individual agenda items.

This Agenda is subject to revision up to 72 hours before the meeting.

A. CALL TO ORDER AND ROLL CALL

B. CEREMONIALS (Flag Salute and Inspiration)

C. PUBLIC SAFETY REPORT

a. Los Angeles County Sheriff's Department Update

b. Los Angeles County Fire Department Update

D. ORAL COMMUNICATIONS - ITEMS NOT ON THE AGENDA (Public Comments)

E. COMMENTS FROM COUNCIL

F. CONSENT CALENDAR

Items 1 through 3 will be considered and acted upon under one motion unless a City Councilmember removes individual items for further City Council consideration or explanation.

1. **Motion to read by title only and waive further reading of all ordinances listed on the Agenda**
   Recommendation: that the City Council approve.

2. **Accounts Payable Register**
   Recommendation: that the City Council adopt Resolution No. CC-2312-050 authorizing the payment of certain claims and demands in the amount of $308,379.86.

3. **Minutes of the Lawndale City Council Regular Meeting, November 20, 2023**
   Recommendation: that the City Council approve.

G. PUBLIC HEARINGS

4. **Selection of Projects for the Fiscal Year 2024-25 (50th) Program Year of the Community Development Block Grant Program (CDBG)**
   Recommendation: that the City Council 1.) Conduct a public hearing; 2.) Adopt the FY 2024-25 budget for the CDBG program; and 3.) Adopt Resolution No. CC-2312-047 Approving the City's participation in the FY 2024-25 CDBG Program.

5. **Case No. 23-19, Consideration and Adoption of a Comprehensive Update to the City's General Plan (2045) and Adoption of an Associated Environmental Impact Report (EIR)**
   Recommendation: that the City Council A.) Approve Resolution No. CC-2312-49 Approve and Certify the Final Environment Impact Report; and B.) Adopt Resolution No. CC-2312-048 recommending that the City Council approve the General Plan 2045 comprehensive update.

H. ADMINISTRATION

6. **Award One-Year On-Call Traffic Engineering Services Contract**
   Recommendation: that the City Council award an On-Call Traffic Engineering Services agreement to W.G. Zimmerman Engineering, Inc., Advantec Consulting Engineers, Inc., and Transtech Engineers, Inc. for a term of one-year, with an option to extend up to four one-year extensions.

I. CITY MANAGER REPORT

J. ITEMS FROM CITY COUNCILMEMBERS

7. **Discussion of Three (3) Letters Distributed at the November 16, 2023 South Bay Cities Council of Governments Board of Directors' Meeting from Los Angeles County Board of Supervisor Holly J. Mitchell Regarding Metro C-Line (Green) Extension to Torrance Project Funding Gap Requested by Councilmember Kearney**

8. **Mayor/City Councilmembers Report of Attendance at Meetings and/or Events**

K. CLOSED SESSION

9. Conference with Labor Negotiator

The City Council will conduct a closed session, pursuant to Government Code section 54957.6, with the City Manager, the City Attorney, and the City's negotiators, regarding labor negotiations with Local 1895, Council 36, American Federation of State, County and Municipal Employees, AFL-CIO, representing the City's mid-management and classified employees.

10. Conference with Legal Counsel – Existing Litigation

The City Council will conduct a closed session, pursuant to Government Code section 54956.9(d)(1), to discuss existing litigation: Name of Case: Abdul R. Pasta V. The City of Lawndale, Los Angeles Superior Court Case No. 23STLC07381.

11. Public Employee Performance Evaluation

The City Council will hold a closed session, pursuant to Government Code section 54957(b), to conduct an employee evaluation concerning the City Manager.

L. ADJOURNMENT

The next regularly scheduled meeting of the City Council will be held at 6:30 p.m. on Monday, December 18, 2023, in the Lawndale City Hall Council Chamber, 14717 Burin Avenue, Lawndale, California.

It is the intention of the City of Lawndale to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you need special assistance beyond what is normally provided, we will attempt to accommodate you in every reasonable manner. Please contact the City Clerk Department (310) 973-3213 prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible. Please advise us at that time if you will need accommodation to attend or participate in meetings on a regular basis.

I hereby certify under penalty of perjury under the laws of the State of California that the Agenda for the regular meeting of the City Council to be held on December 4, 2023, was posted not less than 72 hours prior to the meeting.

/s/ Yvette Hall
Yvette Hall, Assistant City Clerk

Back to Agenda

CITY OF LAWNDALE
14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Yvette Hall, Assistant City Clerk

SUBJECT: Motion Pertaining to the Reading of Ordinances

BACKGROUND

California Government Code reads, in part, as follows:

> "Except when, after reading the title, further reading is waived by regular motion adopted by majority vote, all ordinances shall be read in full either at the time of introduction or passage."

RECOMMENDATION

Staff recommends that the City Council read by title only and waive further reading of all ordinances listed on the agenda.

Back to Agenda

RESOLUTION NO. CC-2312-050

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA AUTHORIZING CERTAIN CLAIMS AND DEMANDS IN THE SUM OF $308,379.86

THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. That in accordance with Sections 37202 and 37209 of the Government Code, the Director of Finance, as certified below, hereby attests to the accuracy of these demands and to the availability of funds for the payment thereof.

SECTION 2. That the following claims and demands have been audited as required by law, and that appropriations for these claims and demands are included in the annual budget as approved by the City Council.

SECTION 3. That the claims and demands paid by check numbers 205141 through 205216 for the aggregate total of $308,379.86 are hereby authorized.

Effective Date: December 4th, 2023

Approved by:

Hrant Manuelian, Director of Finance

Gregory M. Murphy, City Attorney

PASSED, APPROVED AND ADOPTED this 4th day of December 2023.

Robert Pullen-Miles, Mayor

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Erica Harbison, City Clerk of the City of Lawndale, California, do hereby certify that the City Council of the City of Lawndale duly approved and adopted the foregoing Resolution No. CC-2312-050 at a regular meeting of said Council held on the 4th day of December 2023, by the following roll call vote:

Name	Voting		Present, Not Voting		Absent
	Aye	No	Abstain	Not Participating	
Robert Pullen-Miles, Mayor					
Sirley Cuevas, Mayor Pro Tem					
Pat Kearney					
Rhonda H. Gorman					
Bernadette Suarez					

_____

Erica Harbison, City Clerk

City of Lawndale
Summary of Audited Claims and Demands

Claims and Demands Paid By Check:

Check Date	Check Number Beginning	Ending	Aggregate Total
11/16/2023	205141	205182	116,293.58
11/22/2023	205183	205216	192,086.28
Total Checks			**308,379.86**

Check# 205191 is a reissuance of previously approved check# 204543.

Claims and Demands Paid By Electronic ACH Transfer:

Date	Name of Payee	Description	Amount
	Total ACH Payments		**0.00**
Total Audited Claims and Demands Paid			**308,379.86**

Check Register Report

City of Lawndale

BANK: WELLS FARGO BANK N.A

Date: 11/15/2023
Time: 5:48 pm
Page: 1

Check Number	Check Date	Status	Void/Stop Date	Vendor Number	Vendor Name	Check Description	Amount
WELLS FARGO BANK N.A Checks							
205141	11/16/2023	Printed		1541	ALESHIRE & WYNDER, LLP	LEGAL SERVICES - OCT. 2023	74.00
205142	11/16/2023	Printed		6369	AM-TEC TOTAL SECURITY INC.	ALARM SERVICES Q4 2023	925.52
205143	11/16/2023	Printed		2207	ASAP SIGN & BANNER, LLC	CARBONLESS FORMS FOR BULK	294.37
205144	11/16/2023	Printed		7494	EVELYN BAHURINSKY	CLASS FEE REFUND	224.00
205145	11/16/2023	Printed		8219	ROSA BARAJAS	CLASS FEE REFUND	120.00
205146	11/16/2023	Printed		8227	CYNTHIA CARMONA	CLASS FEE REFUND	120.00
205147	11/16/2023	Printed		7949	CHAPALA DANCE ACADEMY LLC	INSTRUCTOR FEES - MEXICAN FOLK	3,230.00
205148	11/16/2023	Printed		7818	CHILL ENTERTAINMENT	POP-UP SKATING RINK -	2,999.50
205149	11/16/2023	Printed		0615	CLEANSTREET, LLC	CITY-WIDE STREET SWEEPING	18,243.50
205150	11/16/2023	Printed		0219	COUNTY OF LA DEPT OF PUBLIC WK	INDUSTRIAL WASTE - SEP 2023	6,352.36
205151	11/16/2023	Printed		8125	G2K CONSTRUCTION, INC	PWD & SHERIFF STATION FACILITY	11,203.43
205152	11/16/2023	Printed		8221	VIRI GAMBOA	CLASS FEE REFUND	120.00
205153	11/16/2023	Printed		8222	CATHERINE GAYDOSH	CLASS FEE REFUND	120.00
205154	11/16/2023	Printed		8232	GLENDA GIRON	CLASS FEE REFUND	120.00
205155	11/16/2023	Printed		8216	GOLDEN STATE MOLD INSPECTIONS	MOLD TEST ANALYSIS - CSD	375.00
205156	11/16/2023	Printed		8229	CRYSTAL HENDRICK	CLASS FEE REFUND	112.00
205157	11/16/2023	Printed		6051	INFANTE BROS LAWNMOWER SHOP	WEED KILLER & OIL MIX	347.29
205158	11/16/2023	Printed		8217	JLM ENVIRONMENTAL	MOLD TEST - CSD	550.00
205159	11/16/2023	Printed		8097	STEPHANIE LE	CLASS FEE REFUND	120.00
205160	11/16/2023	Printed		8224	TERESA LOZANO	CLASS FEE REFUND	232.00
205161	11/16/2023	Printed		8225	DESIREA MEDRANO	CLASS FEE REFUND	120.00
205162	11/16/2023	Printed		5560	MITSUBISHI ELECTRIC US, INC	ELEVATOR MAINTENANCE SERVICES	616.46
205163	11/16/2023	Printed		8230	BRASILIA NUNO	CLASS FEE REFUND	120.00
205164	11/16/2023	Printed		8220	BARBARA ORDONEZ	CLASS FEE REFUND	232.00
205165	11/16/2023	Printed		8083	MARIBEL PALMER	CLASS FEE REFUND	120.00
205166	11/16/2023	Printed		8226	JAMES PEERA	CLASS FEE REFUND	120.00
205167	11/16/2023	Printed		8228	MARIAN PERDOMO	CLASS FEE REFUND	336.00
205168	11/16/2023	Printed		8218	JESUS PONCE	CONS & DEMO DEPOSIT REFUND	270.00
205169	11/16/2023	Printed		6123	PRUDENTIAL OVERALL SUPPLY	WEEKLY MOP CHARGES	248.34
205170	11/16/2023	Printed		5412	SOUTH BAY CAR CARE INC.	BUS MAINT.& INSPECTION	201.50
205171	11/16/2023	Printed		0211	SOUTHERN CALIFORNIA NEWS GROUP	LEGAL ADS - CITY COUNCIL	150.31
205172	11/16/2023	Printed		8141	TRANSPORTATION CONCEPTS	LAWNDALE BEAT FIXED ROUTE -	52,202.21
205173	11/16/2023	Printed		8120	TUCKER TOURS, LLC	TRAVEL CLUB - SINATRA &FRIENDS	6,110.00
205174	11/16/2023	Printed		3672-CMD	U.S. BANK	CREDIT CARD PAYMENT	2,849.67
205175	11/16/2023	Printed		3672-PWD	U.S. BANK	CREDIT CARD PAYMENT	869.39
205176	11/16/2023	Printed		7768	UNITED SITE SERVICES	PORTABLE RESTROOM RENTAL	103.28
205177	11/16/2023	Printed		8231	JUAN C. VARGAS	PLANNING DEPOSIT REFUND	1,553.02
205178	11/16/2023	Printed		3373	VERIZON WIRELESS	M2M ACCOUNT SHARE DATA LINE	25.02
205179	11/16/2023	Printed		3373	VERIZON WIRELESS	DESK & CELL PHONE SERVICE	3,733.14
205180	11/16/2023	Printed		0480	VISTA PAINT	GRAFFITI SUPPLIES	198.27
205181	11/16/2023	Printed		6649	ERIC YANES	CLASS FEE REFUND	112.00
205182	11/16/2023	Printed		8223	FRANCES YEH	CLASS FEE REFUND	120.00

City of Lawndale

BANK: WELLS FARGO BANK N.A

Check Number	Check Date	Status	Void/Stop Date	Vendor Number	Vendor Name	Check Description	Amount
			Total Checks: 42			**Checks Total (excluding void checks):**	**116,293.58**
			Total Payments: 42			**Bank Total (excluding void checks):**	**116,293.58**
			Total Payments: 42			**Grand Total (excluding void checks):**	**116,293.58**

Check Register Report

City of Lawndale

BANK: WELLS FARGO BANK N.A

Date: 11/21/2023
Time: 2:49 pm
Page: 1

Check Number	Check Date	Status	Void/Stop Date	Vendor Number	Vendor Name	Check Description	Amount
WELLS FARGO BANK N.A Checks							
205183	11/22/2023	Printed		8045	ART PRINTING SERVICE	BUSINESS CARDS - GRACE HUIZAR	112.46
205184	11/22/2023	Printed		2207	ASAP SIGN & BANNER, LLC	VINYL LETTERING - ANGEL TREE	170.00
205185	11/22/2023	Printed		0372C	AT & T - CALNET3	PHONE CHARGES	1,476.26
205186	11/22/2023	Printed		8164	BLUE VIOLET NETWORKS	SECURITY CAMERAS - HOGAN PARK	1,975.72
205187	11/22/2023	Printed		7766	BURKE, WILLIAMS &	LEGAL SERVICES - OCT. 2023	47,796.90
205188	11/22/2023	Printed		6459	CASC ENGINEERING & CONSULTING	NPDES PERMIT COMPLIANCE SVCS -	5,537.50
205189	11/22/2023	Printed		0190	COLONIAL LIFE & ACCIDENTS, INC	NOV. 2023-INS PRE-TAX/POST TAX	2,530.92
205190	11/22/2023	Printed		7934A	COMPUTERSHARE CORPORATE TRUST	TRUSTEE FEE- LAWNDALE RDA 2009	2,500.00
205191	11/22/2023	Printed		8145	KEVIN COOK	PLANNING DEPOSIT REFUND	717.64
205192	11/22/2023	Printed		7577	DE NOVO PLANNING GROUP	GENERAL PLAN & SPECIFIC PLAN	24,158.50
205193	11/22/2023	Printed		0216	DELTA DENTAL	NOV. 2023 DENTAL PREMIUM	1,985.46
205194	11/22/2023	Printed		0389	DELTA DENTAL INS	NOV. 2023 DENTAL PREMIUM	235.02
205195	11/22/2023	Printed		1288	EWING IRRIGATION PRODUCTS INC	IRRIGATION PARTS	496.18
205196	11/22/2023	Printed		8233	RENE GARCIA	CONS & DEMO DEPOSIT REFUND	1,350.00
205197	11/22/2023	Printed		0441	GOLDEN STATE WATER CO.	WATER USAGE SERVICES	18,480.03
205198	11/22/2023	Printed		8150	HEALTH AND HUMAN RESOURCE	NOV. 2023 EMPLOYEE ASSIST	72.90
205199	11/22/2023	Printed		7940	MARIPOSA LANDSCAPES, INC	TREE REMOVAL SVCS - AUG 2023	45,857.37
205200	11/22/2023	Printed		6134	JOHN MARTINEZ	PLANNING COMMISSION STIPEND	50.00
205201	11/22/2023	Printed		7890	ODP BUSINESS SOLUTIONS LLC	OFFICE SUPPLIES	94.69
205202	11/22/2023	Printed		6815	OOH LA-LA FACE PAINTING	FACE PAINTERS & BALLOON	1,195.00
205203	11/22/2023	Printed		1140	PACIFIC TIRE SERVICE	TIRE REPAIR VEH#508	20.00
205204	11/22/2023	Printed		7764	NI KAL S. PRICE	PLANNING COMMISSION STIPEND	50.00
205205	11/22/2023	Printed		5068A	QUADIENT FINANCE USA INC	CITY HALL POSTAGE - OCT. 2023	1,500.00
205206	11/22/2023	Printed		2051	MADONNA SITKA	PLANNING COMMISSION STIPEND	50.00
205207	11/22/2023	Printed		6680	SCOTT SMITH	PLANNING COMMISSION STIPEND	50.00
205208	11/22/2023	Printed		8236	SOCAL NAVARRO FIELD SERVICES	PLANNING DEPOSIT REFUND	2,154.31
205209	11/22/2023	Printed		6034	SOUTH COAST MECHANICAL LLC	HVAC SERVICE REPAIR - CSD	908.34
205210	11/22/2023	Printed		0439	SOUTHERN CALIFORNIA EDISON CO.	UTILITIES ELECTRICITY	19,799.42
205211	11/22/2023	Printed		0440	SOUTHERN CALIFORNIA GAS CO.	UTILITY GAS CHARGES	117.15
205212	11/22/2023	Printed		8177	SOUTHWEST PATROL, INC.	ARMED SECURITY SERVICES	2,800.00
205213	11/22/2023	Printed		0346	SPARKLETTS	BOTTLE WATER SERVICE-	927.77
205214	11/22/2023	Printed		2002	THE STANDARD, UNIT 22	LIFE,AD&D,LTD INSURANCE PREM -	1,646.65
205215	11/22/2023	Printed		3672-CSD	U.S. BANK	CREDIT CARD PAYMENT	4,215.36
205216	11/22/2023	Printed		0479	VISION SERVICE PLAN	VISION PREMIUM NOV. 2023	1,054.73

Total Checks: 34 — **Checks Total (excluding void checks): 192,086.28**

Total Payments: 34 — **Bank Total (excluding void checks): 192,086.28**

Total Payments: 34 — **Grand Total (excluding void checks): 192,086.28**

Back to Agenda

DRAFT MINUTES
LAWNDALE CITY COUNCIL REGULAR MEETING
November 20, 2023

A. CALL TO ORDER AND ROLL CALL

Mayor Pullen-Miles called the meeting to order at 6:31 p.m. in the City Hall Council Chamber, 14717 Burin Avenue, Lawndale, California.

Councilmembers Present: Mayor Robert Pullen-Miles, Mayor Pro Tem Sirley Cuevas, Councilmember Rhonda Hofmann Gorman, Councilmember Pat Kearney, Councilmember Bernadette Suarez

Other Participants: City Manager Sean M. Moore, Assistant City Attorney Stephanie Gutierrez, City Clerk Erica Harbison, Assistant City Clerk Yvette Hall, Deputy City Manager/Director of Human Resources Raylette Felton, Los Angeles County Sheriff's Department Sergeant Justin Smith, Municipal Services Director Michael Reyes, Finance Director Hrant Manuelian, Community Development Manager Jared Chavez, Public Works Director Lea Reis

B. CEREMONIALS

Councilmember Suarez led the flag salute and Pastor Dwight Dudley of Calvary Chapel South Bay provided the inspiration.

C. PUBLIC SAFETY REPORT

a. Los Angeles County Sheriff's Department Update

Sergeant Smith summarized the recent law enforcement activities. He announced that there will be a Coffee with a Cop event on December 13, 2023, to introduce the new Los Angeles County Sheriff's Department (LASD) Captain.

D. PRESENTATION

1. Legislative Update

Senator Steven Bradford's Office will provide a legislative update.

Senator Bradford provided legislative updates for FY 2023-24. He announced a Turkey Giveaway to be held on November 21, 2023 and a Toy Giveaway to be held on December 9, 2023.

Mayor Pullen-Miles thanked Senator Bradford for the hard work he does on behalf of the community and requested consideration of funding for the City's Youth Development Center.

DRAFT

E. ORAL COMMUNICATIONS - ITEMS NOT ON THE AGENDA (Public Comments)

Ray Hollar, Resident, commented on the City's automatic license plate recognition program (ALPR) and requested additional information be provided on the program discussed at a previous City Council meeting.

Michelle Pino, Library Manager, thanked Mayor Pullen-Miles and Councilmember Kearney for attending a recent event and announced the library's upcoming events.

Ali Zaidi, Resident, commented on parking issues on his street and requested assistance from the City.

Samina Arain, Resident, commented on parking issues on her street and requested assistance from the City.

Uzair Pasta, Resident, commented on an illegal fireworks citation that he received as the owner of a property and asked the City Council to reevaluate the illegal fireworks ordinance.

Alexander Vigueras Jr., Resident, commented on parking issues on 173rd Street.

Sophia Pasta, Resident, commented on an illegal fireworks citation that she received as the owner of a rental property and the process to dispute citations.

Jay Gould, Resident, thanked the City Council for writing a letter to Metro regarding Metro's interactions with him, commented on the Metro C Line (Green) Project and Metro's budget for the project.

Joi Robertson, Representative for Senator Bradford, announced a Turkey Giveaway to be held on November 21, 2023 and a Toy Giveaway to be held on December 9, 2023.

F. COMMENTS FROM COUNCIL

Councilmember Hofmann Gorman thanked everyone for attending the meeting tonight. She thanked Senator Bradford and his staff for their work on behalf of the community, thanked Library Manager Pino for the updates, and asked City Manager Moore if staff could investigate the parking concerns at 153rd Street. Councilmember Hofmann Gorman asked for information on the illegal fireworks citations, commented that the City supports Resident Gould on matters related to Metro and asked for additional information on the ALPR that Resident Hollar commented on.

City Manager Moore commented that staff will investigate the parking issues at 153rd Street. He stated that the City cannot comment on the illegal firework citations as they are in litigation, and that staff will speak with Resident Hollar regarding his comments on the ALPRs project.

Councilmember Kearney thanked everyone that spoke at the meeting tonight and asked about parking allowances implemented by the State of California.

Councilmember Suarez thanked everyone for attending the meeting tonight and asked to receive the information that Resident Hollar referenced regarding ALPRs. She asked for a

DRAFT

description of the 72-hour parking regulations. Councilmember Suarez requested an update on the illegal fireworks citations and commented on the Metro budget information provided by Resident Gould.
Assistant City Attorney Gutierrez stated that she will work with City Manager Moore to provide information on the ALPRs.

Municipal Services Director Reyes explained the 72-hour parking regulations.
City Manager Moore responded that staff will provide an update on the illegal fireworks citations after the appeal hearings are finalized.

Mayor Pro Tem Cuevas thanked everyone that attended tonight's meeting and encouraged residents to share their concerns with the City Council.

Mayor Pullen-Miles thanked everyone for speaking at tonight's meeting and requested a discussion on the illegal fireworks bail amount, commented on the 72-hour parking regulations, thanked Resident Gould for the Metro updates and Library Manager Pino for the library events updates, and Senator Bradford's Office and staff for attending the meeting.

G. CONSENT CALENDAR

2. Motion to read by title only and waive further reading of all ordinances listed on the Agenda
Recommendation: that the City Council approve.

3. Accounts Payable Register
Recommendation: that the City Council adopt Resolution No. CC-2311-046 authorizing the payment of certain claims and demands in the amount of $866,624.53.

4. Minutes of the Lawndale City Council Regular Meeting, November 6, 2023
Recommendation: that the City Council approve.

5. South Bay Workforce Investment Board Quarterly Summary Report
Recommendation: that the City Council receive and file.

A motion was made by Councilmember Kearney and seconded by Mayor Pro Tem Cuevas to approve the Consent Calendar. The motion passed by a vote of 5-0.

H. ADMINISTRATION

6. Update of Lawndale Municipal Code Title 12, Chapter 12.64 regarding E-bikes usage and restrictions
Recommendation: that the City Council choose one of the following options for directing staff: Option l) City Council will direct staff to amend Lawndale Municipal Code to include additional restrictions and safety measures for E-bike usage; or Option 2) City Council will direct staff to leave Lawndale Municipal Code as it currently stands regarding existing restrictions and safety measures for E-bike usage; or Option 3) City Council will give staff directives on changes they wish to implement on E-bike usage.

Municipal Services Director Reyes presented the staff report.

DRAFT

Councilmember Suarez asked how other cities regulate E-bikes usage and what kind of complaints the City has received about E-bikes.

Municipal Services Director Reyes responded that E-bikes are encouraged by California State law due to their energy and fuel efficiency; however, most cities do not allow them to be rented or kept on City streets, and that the City has the option to put restrictive safety guidelines in place. Municipal Services Director Reyes also stated that LASD enforces E-bike usage, therefore, the City does not have complaints of E-bikes on file. He indicated that according to LASD, there have not been any E-bike citations issued, but there have been two accidents with injuries involving E-bikes.

City Manager Moore explained that he observes riders on E-bikes at high speeds throughout City property and on the streets without a helmet. He stated that the riders do not adhere to the traffic laws. City Manager Moore clarified that staff is requesting the City Council consider additional restrictions or provide staff with further direction.

Councilmember Hofmann Gorman commented that she would like to be proactive with the E-bikes usage regulations and would like to know what options are available.

Mayor Pro Tem Cuevas commented that since E-bike riders are supposed to follow the same regulations as bicyclists and motorcyclists, she suggested that the City start with enforcement of the current ordinance.

Municipal Services Director Reyes responded that LASD can enforce E-bike usage without changing the current ordinance.

Mayor Pullen-Miles commented that he is concerned about E-bike riders' safety, riding on private property and agreed to enforce the current ordinance first.

Assistant City Attorney Gutierrez explained the E-bike classification levels.

Discussion ensued among the City Council regarding E-bike restrictions, safety regulations, and regulations of other cities.

By consensus, the City Council directed staff to actively enforce the City's E-bike ordinance and bring back additional safety information and E-bike regulations from surrounding cities.

7. <u>Award of Construction Contract to J&E Asphalt Maintenance for the FY 2023/24 Citywide Sign Replacement Project</u>

Recommendation: that the City Council 1.) Award construction contract in the amount of $1,294,210 to J&E Asphalt Maintenance, for the FY 2023/24 Citywide Sign Replacement Project; and 2.) Approve the construction contingency amount of $517,684 for the project to avoid delays and facilitate timely project completion.

Public Works Director Reis presented the staff report.

DRAFT

A motion was made by Councilmember Kearney and seconded by Mayor Pro Tem Cuevas to award the construction contract in the amount of $1,294,210 to J&E Asphalt Maintenance, for the FY 2023/24 Citywide Sign Replacement Project and approve the construction contingency amount of $517,684 for the project to avoid delays and facilitate timely project completion. The motion passed by a vote of 5-0.

I. CITY MANAGER REPORT

City Manager Moore commented that he had no items to report.

J. ITEMS FROM CITY COUNCILMEMBERS

8. Approval of Letter to Metro regarding Interactions with Lawndale Resident Mr. Jay Gould

Recommendation: that the City Council approve the letter, authorize the Mayor to sign the letter on behalf of the City Council, and direct staff to mail the letter to Metro.

City Manager Moore presented the letter for consideration and approval.

Councilmember Suarez suggested a change to the wording in the last paragraph.

A motion was made by Councilmember Kearney and seconded by Councilmember Hofmann Gorman to approve the letter to Metro with the changes suggested by Councilmember Suarez, authorize the Mayor to sign the letter on behalf of the City Council, and direct staff to mail the letter to Metro. The motion passed by a vote of 5-0.

9. Mayor/City Councilmembers Report of Attendance at Meetings and/or Events

Councilmember Hofmann Gorman participated in a Zoom call with the California Contract Cities Association (CCCA), attended the South Bay Workforce Investment Board (SBWIB) Awards Ceremony, and the CCCA monthly meeting.

Councilmember Kearney attended the City's Field of Honor event, Contract Cities Liability Trust Fund Oversight Committee Meeting, SBWIB Awards Ceremony, and United Against Hate Week event.

Councilmember Suarez attended the City's Field of Honor event, SBWIB Meeting, South Bay Cities Council of Governments' (SBCCOG) Volunteer Reception, SBCCOG's Board of Directors' meeting, and commented that Los Angeles County Supervisor Holly Mitchell is hosting a community walk on December 16, 2023, regarding the Metro C Line (Green) Project.

Councilmember Hofmann Gorman announced the City's Angel Tree Lighting event to be held on December 1, 2023, and requested that illegal fireworks announcements be made via the electronic notification trailers and information be placed on the City's website and social media.

Mayor Pro Tem Cuevas attended the SBWIB Awards Ceremony and congratulated Resident Carina Noyola who received the 2023 Recognition Award and wished everyone a happy Thanksgiving.

DRAFT

Mayor Pullen-Miles attended the United Against Hate event, Los Angeles County Sanitation Districts Meeting, the City's Field of Honor event, and wished everyone a happy Thanksgiving.

K. CLOSED SESSION

10. Conference with Labor Negotiator

The City Council will conduct a closed session, pursuant to Government Code section 54957.6, with the City Manager, the City Attorney, and the City's negotiators, regarding labor negotiations with Local 1895, Council 36, American Federation of State, County and Municipal Employees, AFL-CIO, representing the City's mid-management and classified employees.

Assistant City Attorney Gutierrez read the aforementioned Closed Session matter by title only in conjunction with Closed Session Item No. K. 11.

11. Conference with Legal Counsel – Anticipated Litigation

The City Council will conduct a closed session, pursuant to Government Code section 54956.9(d)(4), to discuss the potential initiation of litigation: one (1) case.

The City Council convened into closed session at 8:13 p.m.

The City Council reconvened from closed session at 8:55 p.m.

Assistant City Attorney Gutierrez announced that there was no reportable action for Closed Session Item No. K.10. Conference with Labor Negotiator, and no reportable action for Item No. K.11. Conference with Legal Counsel – Anticipated Litigation.

L. ADJOURNMENT

Mayor Pullen-Miles and Councilmember Hofmann Gorman adjourned the meeting in memory of former Councilmember and community volunteer Nancy Marthens, who served the City for 24 years and passed away on July 10, 2023.

There being no further business to conduct, the Mayor adjourned the meeting at 8:59 p.m.

_____
Robert Pullen-Miles, Mayor

ATTEST:

_____
Erica Harbison, City Clerk
Approved: 12/4/2023

DRAFT

Back to Agenda

CITY OF LAWNDALE

14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Sean M. Moore, City Manager

PREPARED BY: Jared Chavez, Community Development Manager

SUBJECT: **Selection of Projects for the Fiscal Year 2024-25 (50th) Program Year of the Community Development Block Grant Program**

BACKGROUND

The 1974 Housing and Urban Development Act established the Community Development Block Grant (CDBG) program in order to allocate Federal funds for State and local use. The use of these funds is restricted to programs that assist low and moderate-income persons. A secondary objective is to prevent and eliminate slum and blight conditions within a community.

The City of Lawndale is a participant in the Los Angeles Urban County CDBG program, and receives an annual allocation of CDBG funds from the Los Angeles County Development Authority (LACDA). The current estimate for the new CDBG allocation for FY 2024-25 is $268,304. This estimate is based on current CDBG funding levels and is consistent with the amount of funding the City has received over the last several years. This proposed CDBG allocation is a planning estimate only; LACDA will release final appropriations in spring 2024. The City's final CDBG allocation is generally within five to ten percent (5%-10%) of the estimate provided.

There are a number of other requirements for CDBG programs. CDBG funds may only be spent in those areas of the City determined to be block grant eligible (See Attachment A). The public must be given the opportunity to comment on the proposed budget (See Attachment B, Public Hearing Notice). Notices of a public hearing were posted at City Hall and published in the *Daily Breeze* on November 16, 2023, pursuant to the applicable public noticing requirements.

Lastly, the maximum amount of CDBG monies that the City may devote to public service projects is up to 15% of its new year allocation (approximately $40,245) and no single public service activity may be funded for less than $10,000.

The recommended CDBG expenditures for FY 2024-25 are consistent with the requirements listed above. The City's FY 2024-25 proposed program of projects and funding levels must be submitted to the LACDA no later than February 1, 2024. The project have been submitted to LACDA before the deadline.

STAFF REVIEW

As described previously, each year the LACDA provides a planning estimate of new CDBG funds that will be made available to the City. The proposed budget retains existing programs and provides sufficient funding for critical projects. The proposed funding strategy is as follows:

Senior Activities Program: The amount to be allocated for senior activities will be the maximum percentage (15%) allowed for public service programs. An estimated $40,245 will be used to continue the existing Senior Activities Nutrition Program.

Street Resurfacing Projects: The proposed resurfacing projects include the following streets:

Proposed Resurfacing Projects

Street Name:	From:	To:	PCI:	Estimated:
Eastwood	Marine	154th	~43	$165,000
154th	Larch Ave.	Freeman	~32	$40,000
154th	Grevillea Ave.	Hawthorne Blvd	~28	$ 22,000
Total				$227,000

These projects will consist of street improvements, including cold mill variable depth of existing asphalt pavement, installation of new asphalt - asphalt rubber hot mix (ARHM), saw cutting and removal and reconstruction of PCC curb & gutters, reconstruction of curb ramps, reconstruction of driveway approaches, reconstruction of sidewalk, adjusting utility covers to grade, and pavement striping. The estimated project cost is $227,000. Any unallocated CDBG funds not utilized (contingency funds) are rolled over to the following fiscal year and applied toward roadway projects.

ENVIRONMENTAL REVIEW

The proposed funding allocations is not considered to be a project under CEQA. Therefore CEQA does not apply.

COMMISSION REVIEW

Planning Commission review for this project is not required.

LEGAL REVIEW

The City Attorney has reviewed Resolution No CC-2312-047 and approved it as to form.

FISCAL IMPACT

Funding is for the FY 2024-25 budget year and will be incorporated into the City's budget as that budget is prepared. Additionally, CDBG funds awarded to the City will offset direct fiscal impacts to the City's General Fund.

RECOMMENDATION

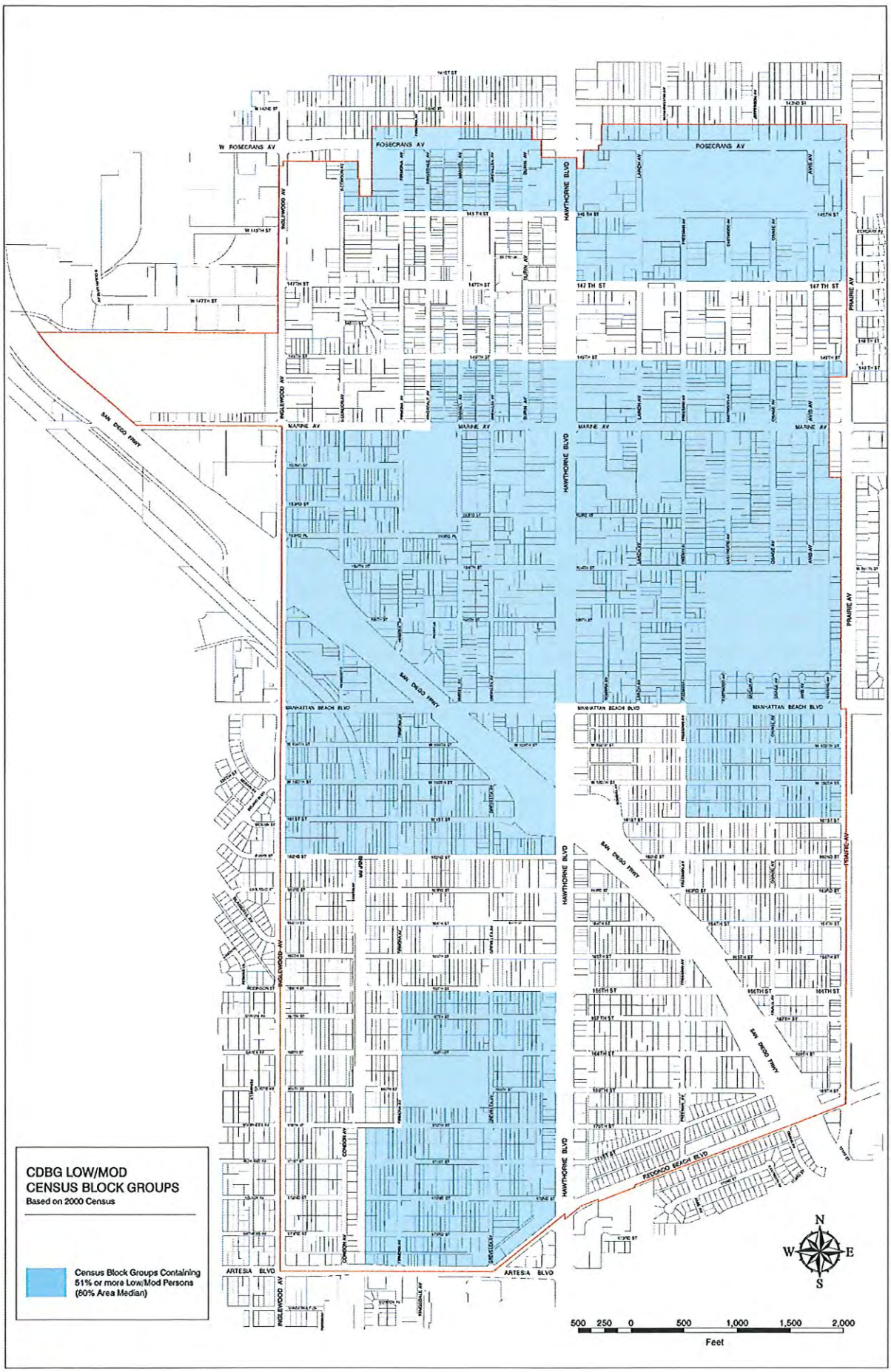
It is recommended that the City Council:

1. Conduct a public hearing;
2. Adopt the FY 2024-25 budget for the CDBG program; and
3. Adopt Resolution No. CC-2312-047, Approving the City's participation in the FY 2024-25 CDBG Program.

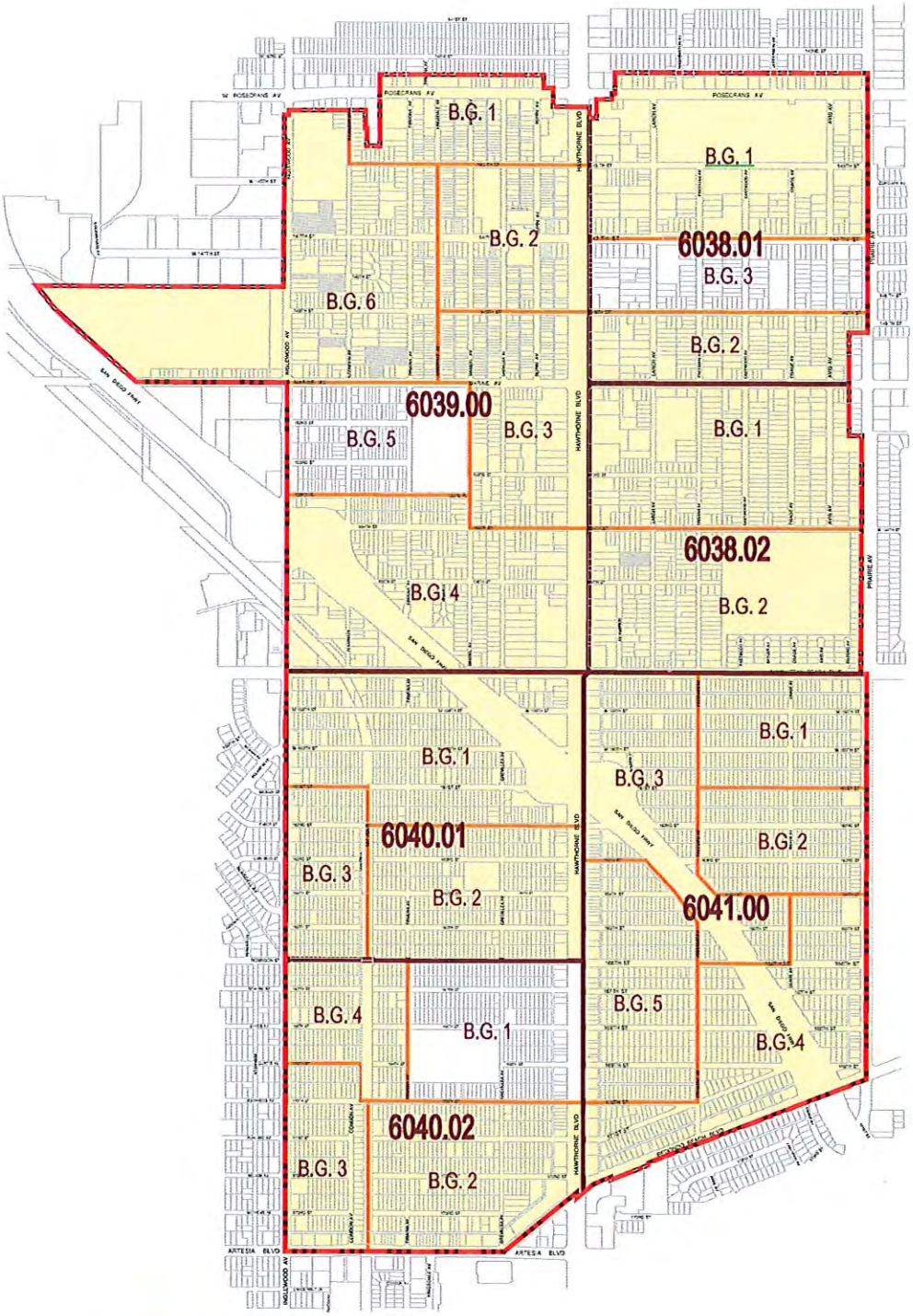
ATTACHMENTS

A. CDBG Eligible Low/Mod Census Tract Map
B. Public Hearing Notice
C. Resolution No. CC-2312-047

ATTACHMENT "A"
CDBG Eligible Low/Mod Census Tract Map



City of Lawndale



CDBG - LOW AND MODERATE INCOME AREA MAP
2010 CENSUS AREAS

(As of July 1, 2014)

N
W E
S

0 ft. 500 ft. 1,000 ft.
scale

LEGEND:

- CITY BOUNDARY
- LOW AND MODERATE INCOME BLOCK GROUPS
- CENSUS TRACT
- BLOCK GROUP

ATTACHMENT B
Public Hearing Notice

Column

OFFICIAL AD PROOF

This is the proof of your ad scheduled to run in **Daily Breeze** on the dates indicated below. If changes are needed, please contact us prior to deadline at **(310) 543-6635**.

Notice ID: h2P9vtYvgAQvou8Y5BMZ | **Proof Updated: Nov. 14, 2023 at 08:50am PST**
Notice Name: CDBG FY24-25 (5007749) | Publisher ID: 0011633742

FILER	**FILING FOR**
Jared Chavez	Daily Breeze
jchavez@lawndalecity.org	
(310) 972-3206	

Columns Wide: 2 **Ad Class:** Legals

11/16/2023: City Notices		279.82
	Subtotal	$279.82
	Tax %	0
	Total	**$279.82**

See Proof on Next Page

PUBLIC NOTICE
CITY OF LAWNDALE
City Council Meeting

Notice is hereby given that at **6:30 p.m. on Monday, December 6, 2023,** the Lawndale City Council will hold a public hearing in the City Council Chambers located at 14717 Burin Avenue, Lawndale, CA to review the following proposal:

PROJECT SELECTION FOR THE 2024-2025 COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM YEAR. The City of Lawndale is soliciting public input to consider the expenditure of funds to be received as a result of the 1974 Housing and Community Development Act. The public is encouraged to attend and suggest needs and priorities for possible funding during the 2024-2025 (50th) program year beginning July 1, 2024. Initial estimates are that Lawndale will be allocated approximately $268,304 for this Program Year. These are restricted funds to be used to assist low and moderate income persons, or to remove slum and blight conditions. A maximum of 15% of the annual allocation may be used for public service projects. A draft program will be presented for the City Council to consider. Current programs include: Senior Activities and Street Improvements.

Those wishing to comment on this item may do so in person at the public hearing, or by submitting written comments by 5:30 p.m., December 6, 2023. You may contact Jared Chavez, Community Development Manager for further information regarding this matter at (310) 973-3230.

Daily Breeze
Published: 11/16/23

City of Lawndale

NOTICE OF A PUBLIC HEARING BEFORE THE CITY COUNCIL OF THE CITY OF LAWNDALE

Notice is hereby given that at **6:30 p.m. on Monday, December 4, 2023,** the Lawndale City Council will hold a public hearing in the City Council Chambers located at 14717 Burin Avenue, Lawndale, CA to review the following proposal:

CASE 23-21: PROJECT SELECTION FOR THE 2024-2025 COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM YEAR.

Pursuant to the California Environmental Quality Act (CEQA) the City of Lawndale has determined that the project is exempt and a Categorical Exemption will be issued.

The files for this proposal are available for review Monday through Thursday, 7:00 a.m. to 6:00 p.m., in the Community Development Department offices located at 14717 Burin Avenue, Lawndale, California. Any grounds for opposing this project must be made at the time of the meeting or made in written correspondence. If you challenge this matter in court, you may be limited to raising only those issues that you or someone else raised during the meeting.

The City of Lawndale's contact person for this case is Jared Chavez, Community Development Manager at (310) 973-3231.

CITY OF LAWNDALE
AFFIDAVIT

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.
CITY OF LAWNDALE)

I hereby certify under penalty of perjury under the laws of the State of California that the "Notice of a Public Hearing Before the City Council of the City of Lawndale for Case 23-21: Project Selection for the 2024-2025 Community Development Block Grant (CDBG) Program Year" was posted on the City's website and the City's bulletin board on November 20, 2023; and that the public hearing notice states that the date of the public hearing is scheduled for 6:30 p.m. on Monday, December 4, 2023.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the City of Lawndale, California.

DATED: November 30, 2023

Yvette Hall
Assistant City Clerk

ATTACHMENT C
Resolution No. CC-2312-047

RESOLUTION NO. CC-2312-047

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA APPROVING THE CITY'S COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM FOR FISCAL YEAR 2024-2025

WHEREAS, on August 22, 1974, the President of the United States signed into law the Housing and Community Act of 1974 (Act); and

WHEREAS, the primary goals of Title I of the Act are the development of viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities, principally for persons of low- and moderate-income; and

WHEREAS, for the past 49 years the City of Lawndale (City) has participated in the Community Development Block Grant (CDBG) Program which was established under the Act; and

WHEREAS, the City has received a planning estimate that $268,304 in CDBG funds will be available to the City for the 2024-2025 Fiscal Year; and

WHEREAS, the City has posted information regarding the Community Development Block Grant Program as required by law and, after notice duly given as required by law, held a public hearing on November 16, 2023 to consider approving the City's proposed Community Development Block Grant Program for fiscal year 2024-2025, and evidence was heard and presented from all persons interested in affecting said proposal, from all persons protesting the same and from members of the City staff, and the City Council has reviewed, analyzed and studied said proposal.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The CDBG projects, FY 2024-2025 funding allocations, as listed in the CDBG Funding Chart for FY 2024-2025 as set forth on Exhibit A attached hereto and incorporated herein are hereby approved as the City's CDBG Program for Fiscal Year 2024-2025.

SECTION 2. That the Mayor and/or City Manager are authorized and directed to submit the City's proposed 2024-2025 planning documents to the Los Angeles County Development Authority (LACDA) setting forth the City's proposed projects and funding allocations. Should minor adjustments to the allocations vary from the figures contained herein and/or any amounts remaining unspent at the close of the preceding fiscal year, the City Manager is authorized to adjust funding to the approved eligible activities as necessary.

SECTION 3. That the Mayor and/or City Manager are authorized to execute all necessary contracts and agreements with the Los Angeles County Development Authority (LACDA) and

with each approved recipient/subrecipient of the CDBG program, together with any changes therein which may be approved by the City Manager.

SECTION 4. This Resolution shall take effect from and after the date of passage and adoption.

PASSED, APPROVED AND ADOPTED this 4th day of December, 2023

_____
Robert Pullen-Miles, Mayor

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Erika Harbison, City Clerk of the City of Lawndale, California, do hereby certify that the City Council duly introduced the foregoing Resolution No. CC-2312-047 at its regular meeting held on the 4th day of December, 2023, and duly approved and adopted said resolution at its regular meeting held on the 4th day of December, 2023, by the following roll call vote:

Name	Voting		Present, Not Voting		Absent
	Aye	No	Abstain	Not Participating	
Robert Pullen-Miles, Mayor					
Sirley Cuevas, Mayor Pro Tem					
Pat Kearney					
Bernadette Suarez					
Rhonda Hofmann Gorman					

_____
Erica Harbison, City Clerk

APPROVED AS TO FORM:

_____
Gregory M. Murphy, City Attorney

EXHIBIT A
CDBG FUNDING CHART FOR FY 2024-2025

Project Title	Allocated CDBG Funds	Unallocated CDBG Funds(Prior Year) and Leveraged Funds	Total
Senior Activities (Max. 15%) **Nutrition**	$ 40,245	N/A	$ 40,245
Street Projects ***CBDG FY 23/24 Highlighted in Gray**	$ 227,000	$ N/A	$ 135,000
TOTAL	**$267,245**	$ N/A	**$267,245**

Street Name:	From:	To:	PCI:	Estimated:
Eastwood	Marine	154th	~43	$165,000
154th	Larch Ave.	Freeman	~32	$40,000
154th	Grevillea Ave.	Hawthorne Blvd	~28	$ 22,000
Total				$227,000

Back to Agenda

CITY OF LAWNDALE

14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Sean M. Moore, City Manager

PREPARED BY: Jared Chavez, Community Development Manager

SUBJECT: **Case No. 23-19, Consideration, and Adoption of a Comprehensive Update to the City's General Plan (2045) and Adoption of an Associated Environmental Impact Report (EIR).**

BACKGROUND

The City is proposing a comprehensive update to the General Plan (2045). As part of the project the City is proposing the adoption of the General Plan Environmental Impact Report (EIR). The update includes the recently updated Housing Element as well as a new element, Environmental Justice, as required by State Law. The City is also currently working on updating the Hawthorne Boulevard Specific Plan and the City's zoning ordinance to be consistent with the General Plan, these updates are expected to be completed and brought forth for City Council review and adoption in early 2024.

The General Plan is a document that serves as the City's guide to achieve the community's vision for the future. The City's General Plan was adopted by City Council on December 17, 1991. The General plan has had minor amendments and a few major updates but not a comprehensive update since adoption in 1991. The most recent update to the General Plan was completed in 2016, which focused on the Safety Element. The City's General Plan is composed of 7 mandatory and 2 optional elements: Land Use, Open Space, Conservation, Housing, Noise, Safety, Economic Development, and Air Quality. As part of the comprehensive update, the elements are being updated and reconfigured to be clearer and easier to read, while still meeting legal requirements.

The Council is aware that the City recently updated the Housing Element of the General Plan. The State requires that the Housing Element be regularly updated for each upcoming housing cycle, identifying sites that may be suitable for housing development. This was the sixth Regional Housing Needs Assessment cycle update for our Housing Element (2021-2029) . The Housing element (2021-2029) was adopted by City Council on February 7, 2022 and certified by the HCD in October of 2022. Therefore the housing portions of the comprehensive update should already be familiar to you.

ANALYSIS:

The attached comprehensive update to the Lawndale General Plan (2045) will incorporate new local, state, and federal requirements as well as updating the goals and objectives to meet the current needs of the community. The City will implement the General Plan by requiring development, infrastructure improvements, and other projects to be consistent with its policies, and by implementing the actions

included in the General Plan Update. The Update includes a set of goals, policies and actions, organized into elements as well as a revised Land Use Map.

The General Plan has 9 elements which have been updated to meet the current and future priorities of the City. The update includes the following elements: Mobility (Circulation), Resource Management (Conservation, Open Space and Air Quality), Public Safety (Safety and Noise), Environmental Justice, Economic Development, and Community Facilities. The diagram below identifies the elements included in the Lawndale General Plan and the corresponding requirement in State Law.

Relationship Between General Plan Elements and State Requirements

Lawndale General Plan / General Plan Elements	State Mandated: Land Use	Circulation	Conservation	Open Space	Noise	Safety	Housing	Environmental Justice	Optional Topics
Land Use	▲								
Mobility		▲							
Housing (Separate Cover)							▲		
Resource Management			▲	▲					▲
Public Safety					▲	▲			
Environmental Justice								▲	
Economic Development									▲
Community Facilities									▲

General Plan Objectives

The General Plan maintained its goals and objectives consistent with the previous General Plan's objectives as requested by the community. The General Plan objectives include:

- Reflect the current goals and vision expressed by City residents, businesses, decision makers, and other stakeholders;
- Address issues and concerns identified by City residents, businesses, decision-makers, and other stakeholders;
- Protect Lawndale's existing residences, character, and sense of community;
- Proactively plan for and accommodate local and regional growth in a responsible manner;
- Encourage mixed-use development patterns along major corridors that promote vibrant commercial and residential areas;
- Allow for a range of high-quality housing options;

- Attract and retain businesses and industries that provide jobs for local residents;
- Continue to maintain and improve multimodal transportation opportunities;
- Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
- Address new requirements of State law; and
- Address emerging transportation, housing, and employment trends.

Community Outreach

Staff conducted 10 public outreach workshops beginning on February 2021. The community was informed about the General Plan and the proposal to complete a comprehensive update. Each workshop included an overview of the General Plan, its history, why it's important and activities and questions to solicit input from the residents. The City also conducted a number of surveys and polls asking questions both in English and Spanish. The City received a total of 99 responses to the survey.

The community commented on the concerns regarding the existing uses in the City and about issues that are important for the community. The City received several comments about keeping the small town feel of the City intact. Some of the comments received include: appropriate parking requirements for new developments; lower density is preferred; continue with landscaping requirements and offer incentives for drought tolerant landscaping; outline more specified requirements for residential facades to deter "box like" buildings while maximizing utilization; mixed-use projects within Hawthorne Boulevard are desired to enhance the City and its image; request for affordable housing incentives; improve parkways that are not being maintained; to restrict car dealerships, bars, car title loan offices; liquor stores, adult shops, pawn shops, furniture stores, payday loan office and automotive uses, especially when close to parks; bring in uses to generate more sales tax for the City; incentives to attract quality businesses; attract more small-scale businesses; add more green space/community space in commercial development to create places for people to gather; add walkable streets and courtyards in other areas of the city besides Hawthorne Boulevard; approve or encourage more small locally owned businesses. The residents also brought up the fact that there are a lot of uses, such as automotive uses, within the City which are underutilized sites for housing.

Hawthorne Boulevard Specific Plan and Zoning Ordinance

The city is currently undertaking a comprehensive update to its Hawthorne Boulevard Specific Plan (HBSP) and Zoning Ordinance. The General Plan includes a program to ensure that the ongoing updates reflect the development potential identified through implementation of the two new overlay zones, and that the General Plan and Specific Plan are consistent with the Housing Element.

The city will need to adopt two new housing overlays with different maximum density standards to adequately accommodate its RHNA. One overlay will be located within the Hawthorne Boulevard Specific Plan ("HBSP") area. The other overlay will be outside the HBSP area.

The new development standards for the overlay will be part of the zoning ordinance and HBSP update to be presented and adopted later in 2024.

General Plan EIR (Environmental Impact Report)

A Draft Environmental Impact Report was prepared by the City's consultant De Novo Planning Group, as required by the California Environmental Quality Act (CEQA) Sections 15126, 15175 and 15176 of the CEQA Guidelines. The EIR was prepared concurrently with the General Plan policy document to facilitate the development of the General Plan that is largely self-mitigating.

The City circulated a Notice of Preparation (NOP) of an EIR for the proposed project on December 6, 2022 to January 5, 2023. A scoping meeting was held on December 15, 2022. The Notice of Availability was posted for public review and the Draft EIR was available for public review from August 15 to October 2, 2023. Comments were received and responded to on the Final EIR (attached).

PUBLIC REVIEW

A notice was published in the *Daily Breeze* on November 16, 2023. Additionally, notices were posted on the message board outside City of Lawndale's City Hall pursuant to Government Code Section 65091 (a)(5)(B).

PLANNING COMMISSION REVIEW

At a public hearing held on November 15, 2023, the Planning Commission held a special hearing, reviewed the draft and approved Resolution 23-07 and 23-08 recommending that the City Council Approve and Certify the Final Environmental Impact Report, and Approve the General Plan 2045 comprehensive update.

LEGAL REVIEW

The City Attorney has reviewed Resolutions No. CC-2312-48 & CC-2312-049 and has approved them as to form.

RECOMMENDATION

It is recommended that the City Council do the following;

A. Approve Resolution No. CC-2312-49 Approve and Certify the Final Environmental Impact Report; and
B. Adopt Resolution No. CC-2312-048 recommending that the City Council approve the General Plan 2045 comprehensive update.

Attachments

A. Resolution CC-2312-049 FEIR
B. Resolution CC-2312-048 General Plan
C. Planning Commission Resolutions
D. General Plan
E. Final Environmental Impact Report (EIR)
F. Draft Environmental Impact Report (EIR)
G. Draft EIR Appendices

Attachment A

Resolution No. CC-2312-049 FEIR and CEQA findings of significance

RESOLUTION NO. CC-2312-048

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA ADOPTING FINDINGS OF FACT AND A STATEMENT OF OVERRIDING CONSIDERATIONS PERSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA), CERTIFYING THE GENERAL PLAN UPDATE FINAL ENVIRONMENTAL IMPACT REPORT (SCH #202212088).

WHEREAS, the City of Lawndale (the "City") proposes the Lawndale General Plan 2045 (the "Project), a comprehensive update to the City's existing General Plan; and

WHEREAS, the Project amends and modifies the overarching policy document that guides land use, housing, transportation, open space, public safety, community services, and other policy decisions through the City; and

WHEREAS, pursuant to section 210067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14 Section 15000 et. Se.), the City of Lawndale is the lead agency for the proposed Project; and

WHEREAS, prior to the development of the project or environmental documents, the City conducted extensive public outreach hosted 10 public workshops beginning in February 2021 through December 2021. Public workshops included 9 virtual workshops and 1 in person interactive workshop, and

WHEREAS, in accordance with CEQA and the State CEQA Guidelines, the City determined that a Program Environmental Impact Report ("EIR") should be prepared in order to analyze all potential adverse environmental impacts that could potentially result from the adoption and implementation of the proposed Project; and 4.1.a Packet Pg. 70 Attachment: Planning Commission Resolution 23-07 (Lawndale General Plan 2045)

WHEREAS, in accordance with State CEQA Guidelines section 15082, on December 6, 2022, the City sent to the Office of Planning and Research and each responsible and trustee agency a Notice of Preparation ("NOP") stating that an Environmental Impact Report (State Clearinghouse Number #202212088 would be prepared; and

WHEREAS, pursuant to Public Resources Code section 21083.9 and State CEQA Guidelines sections 15082(c) and 15083, the City held a duly noticed Scoping Meeting on December 15, 2022, to solicit comments on the scope of the environmental review of the proposed Project, however, no comments were received during the Scoping Meeting; and

WHEREAS, a Draft Program EIR ("Draft EIR") was prepared, incorporating comments received in response to the NOP ("Exhibit A"); and

WHEREAS, the Draft EIR concluded that the proposed Project would result in significant and unavoidable impacts individual projects anticipated by the General Plan update would be required to implement their own environmental review, and

WHEREAS, in accordance with State CEQA Guidelines section 15085, a Notice of Completion was prepared and filed with the Office of Planning and Research on November 30, 2022; and

WHEREAS, as required by State CEQA Guidelines section 15087(a), the City provided Notice of Availability of the Draft EIR to the public to the Office of Planning and Research, on August 15, 2023; and

WHEREAS, during the public comment period, copies of the Draft EIR and technical appendices were available for review and inspection at City Hall, the City Library, on the City's website, and published in the Press Enterprise; and

WHEREAS, pursuant to State CEQA Guidelines section 15087(e), the Draft EIR was circulated for at least a 45-day public review and comment period from August 15, 2023 to October 2, 2023; and

WHEREAS, during the public review and comment period, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies, and others pursuant to State CEQA Guidelines section 15086; and

WHEREAS, pursuant to Public Resources Code section 21092.5, the City provided copies of its responses to commenting public agencies at least ten (10) days prior to the City's consideration of the Final EIR on October 30, 2023; and

WHEREAS, on October 30, 2023, the City released the Final EIR ("Final EIR"), which consists of the Draft EIR, all technical appendices prepared in support of the Draft EIR, all written comment letters received on the Draft EIR, written responses to all written comment letters received on the Draft EIR, and errata to the Draft EIR and technical appendices; and

WHEREAS, on November 15, 2023, the Planning Commission conducted the public hearing to consider the Draft EIR for the Project and solicited comments on the document. After hearing all relevant testimony from staff, the public and the City's consultant team, the Planning Commission voted to recommend that the City Council certify the EIR for the Project; and

WHEREAS, the "EIR" consists of the Final EIR and its attachments and appendices, as well as the Draft EIR and its attachments and appendices, comments thereto, and responses to comments; and

WHEREAS, all potentially significant adverse environmental impacts were sufficiently analyzed in the EIR; and

WHEREAS, as contained herein, the City has endeavored in good faith to set forth the basis for its decision on the Project; and

WHEREAS, all of the requirements of the Public Resources Code and the State CEQA Guidelines have been satisfied by the City in connection with the preparation of the EIR which is

sufficiently detailed so that all of the potentially significant environmental effects of the Project have been adequately evaluated; and

WHEREAS, the EIR prepared in connection with the Project sufficiently analyzes the Project's potentially significant environmental impacts and the EIR analyzes a range of feasible alternatives capable of reducing these effects to an even lesser level of significance; and

WHEREAS, the City has made certain findings of fact, as set forth in Exhibit A of this resolution, attached hereto and incorporated herein, based upon the oral and written evidence presented to it as a whole and the entirety of the administrative record for the Project, which are incorporated herein by this reference; and

WHEREAS, the City finds that environmental impacts that are identified in the EIR as less than significant and do not require mitigation are described in in the attached exhibit.

WHEREAS, the City finds that there are no environmental impacts that are identified in the EIR that are less than significant with incorporation of mitigation measures as described in Section III of Exhibit A; and

WHEREAS, the City finds that even with the incorporation of all feasible mitigation measures, the environmental impacts that are identified in the EIR that are significant and unavoidable are described in Section IV of Exhibit A; and

WHEREAS, the cumulative impacts of the Project identified in the EIR and set forth herein, are described in Section V of Exhibit A; and

WHEREAS, the potential significant irreversible environmental changes that would result from the proposed Project identified in the EIR and set forth herein, are described in Section VI of Exhibit A; and

WHEREAS, the existence of any growth-inducing impacts resulting from the proposed Project identified in the EIR and set forth herein, are described in Section VII of Exhibit A; and

WHEREAS alternatives to the proposed Project that might further reduce the already less than significant environmental impacts are described in Section VIII of Exhibit A; and

WHEREAS, because the EIR identified significant and unavoidable impacts, the City explains its reasoning for recommending the adoption of the Project despite those impacts in the Statement of Overriding Considerations, as set forth in Section IX of Exhibit A; and

WHEREAS, no comments made in the public hearings conducted by the Planning Commission and no additional information submitted to the City have produced substantial new information requiring recirculation of the EIR or additional environmental review of the Project under Public Resources Code section 21092.1 and State CEQA Guidelines section 15088.5; and

WHEREAS, prior to taking action, as recommended by the Planning Commission on November 15, 2023 the City Council has heard, been presented with, reviewed and considered all of the information

and data in the administrative record, (including but not limited to the EIR) and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The City Council finds and determines that the recitals above are true and correct.

Section 2. The City Council hereby finds that it has been presented with the EIR which it has reviewed and considered, and further finds that the EIR is an accurate and objective statement that has been completed in full compliance with CEQA and the State CEQA Guidelines.

Section 3. The City Council has certified the Final EIR pursuant to the California Environmental Quality Act and adopted Findings of Fact and a Statement of Overriding Considerations for the General Plan 2045. The City Council hereby incorporates by reference as if fully set forth herein, the Resolution certifying the Final EIR and adopting the Findings of Fact, and Statement of Overriding Considerations for the General Plan 2045.

Section 4. City Council adopts Resolutions No. CC2312-048 approving the "CEQA Findings of Fact" where were prepared in accordance with State CEQA Guidelines sections 15091 and which are attached hereto as Exhibit A and incorporated herein by this reference.

Section 5. The City Council hereby certifies that the Final Environmental Impact Report is accurate and objective statement that has been completed in full compliance with CEQA and the State CEQA Guidelines and reflects the independent judgment and analysis of the City; and it declares that no evidence of new significant impacts or any new information of "substantial importance" as defined by the State CEQA Guidelines Section 15088.5 has been received by the City after circulation of the Draft EIR that would require recirculation. Therefore, the City Council certifies the EIR based on the entirety of the record of proceedings.

Section 6. The City Council hereby directs staff to prepare and file a Notice of Determination with the County Clerk of the County of Los Angeles within five working days of the execution of this Resolution and approval of the Project as well as with the State of California's Office of Planning and Research.

PASSED, APPROVED AND ADOPTED this 4th day of December, 2023

_____

Robert Pullen-Miles, Mayor

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Erica Harbison, City Clerk of the City of Lawndale, California, do hereby certify that the City Council of the City of Lawndale duly approved and adopted the foregoing Resolution No. CC-2312-048 at a regular meeting of said Council held on the 4th day of December 2023, by the following roll call vote:

Name	Voting		Present, Not Voting		Absent
	Aye	No	Abstain	Not Participating	
Robert Pullen-Miles, Mayor					
Sirley Cuevas, Mayor Pro Tem					
Pat Kearney					
Bernadette Suarez					
Rhonda Hofmann-Gorman					

_____
Erica Harbison, City Clerk

APPROVED AS TO FORM:

_____
George Murphy, City Attorney

EXIBIT A

CEQA Findings of Fact

EXHIBIT A
CEQA FINDINGS OF FACT

The California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") requires that public agencies shall not approve or carry out a project for which an environmental impact report ("EIR") has been certified that identifies one or more significant adverse environmental effects of a project unless the public agency makes one or more written Findings for each of those significant effects, accompanied by a brief explanation of the rationale for each Finding (State CEQA Guidelines [Cal. Code Regs., tit. 14, § 15000 et seq.], § 15091). This document presents the CEQA Findings of Fact made by the City of Lawndale, in its capacity as the CEQA lead agency, regarding the Lawndale General Plan ("General Plan"), evaluated in the Draft Environmental Impact Report ("Draft EIR") and Final Environmental Impact Report ("Final EIR") for the Project.

SECTION I
INTRODUCTION

Public Resources Code section 21002 states that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" Section 21002 further states that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

Pursuant to section 21081 of the Public Resources Code, a public agency may only approve or carry out a project for which an EIR has been completed that identifies any significant environmental effects if the agency makes one or more of the following written finding(s) for each of those significant effects accompanied by a brief explanation of the rationale for each finding:

1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

2. Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

As indicated above, section 21002 requires an agency to "avoid or substantially lessen" significant adverse environmental impacts. Thus, mitigation measures that "substantially lessen" significant environmental impacts, even if not completely avoided, satisfy section 21002's mandate. (*Laurel Hills Homeowners Assn. v. City Council* (1978) 83 Cal.App.3d 515, 521 ["CEQA does not mandate the choice of the environmentally best feasible project if through the imposition of feasible mitigation measures alone the appropriate public agency has reduced environmental damage from a project to an acceptable level"]; *Las Virgenes Homeowners Fed., Inc. v. County of*

Los Angeles (1986) 177 Cal. App. 3d 300, 309 ["[t]here is no requirement that adverse impacts of a project be avoided completely or reduced to a level of insignificance . . . if such would render the project unfeasible"].)

While CEQA requires that lead agencies adopt feasible mitigation measures or alternatives to substantially lessen or avoid significant environmental impacts, an agency need not adopt infeasible mitigation measures or alternatives. (Pub. Resources Code, § 21002.1(c) [if "economic, social, or other conditions make it infeasible to mitigate one or more significant effects on the environment of a project, the project may nonetheless be carried out or approved at the discretion of a public agency"]; see also State CEQA Guidelines, § 15126.6(a) [an "EIR is not required to consider alternatives which are infeasible"].) CEQA defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code, § 21061.1.) The State CEQA Guidelines add "legal" considerations as another indicia of feasibility. (State CEQA Guidelines, § 15364.) Project objectives also inform the determination of "feasibility." (*Jones v. U.C. Regents* (2010) 183 Cal. App. 4th 818, 828-829.) "'[F]easibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417; see also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715.) "Broader considerations of policy thus come into play when the decision making body is considering actual feasibility[.]" (*Cal. Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000 ("*Native Plant*"); see also Pub. Resources Code, § 21081(a)(3) ["economic, legal, <u>social</u>, technological, <u>or other considerations</u>" may justify rejecting mitigation and alternatives as infeasible] (emphasis added).)

Environmental impacts that are less than significant do not require the imposition of mitigation measures. (*Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337, 1347.)

The California Supreme Court has stated, "[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 576.) In addition, perfection in a project or a project's environmental alternatives is not required; rather, the requirement is that sufficient information be produced "to permit a reasonable choice of alternatives so far as environmental aspects are concerned." Outside agencies (including courts) are not to "impose unreasonable extremes or to interject [themselves] within the area of discretion as to the choice of the action to be taken." (*Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287.)

SECTION II
FINDINGS REGARDING ENVIRONMENTAL IMPACTS NOT REQUIRING MITIGATION

The City Council hereby finds that the following potential environmental impacts of the General Plan are less than significant and therefore do not require the imposition of Mitigation Measures.

A. AESTHETICS

1. Scenic Vistas

Threshold: Would the project have a substantial adverse effect on a scenic vista?

Finding: Less than significant. (Draft EIR, Impact AES-1, pages 5.1-7 through 5.1-9)

Explanation: Scenic views within the Planning Area include long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains. Implementation of the Project would result in new development and intensification of existing urban uses along major corridors, including Hawthorne Boulevard. While the Project does not include any specific development proposals, the Project could facilitate future development projects at higher densities and intensities than currently exist. The City's Zoning Code would regulate development within the City, including building heights, setbacks, massing, and design and architectural regulations.

Pursuant to Lawndale Municipal Code Chapter 17.30, future residential development projects would be reviewed for conformance with the City's established design criteria. Each future development project would be subject to the City's development standards, site plan and/or design review process to ensure conformance with the General Plan Update and the City's established development standards. Future development within the Sphere of Influence (SOI) that is under the County's land use control would be subject to the County's entitlement requirements, regulations, and review processes.

The General Plan Update goals, policies, and actions are intended to ensure that new development and intensification of existing urban uses within the Planning Area would not result in substantial adverse effects on a scenic vista. Proposed Land Use Element Policy LU-3.1 requires that the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area be considered during the development review process. Policy LU-3.3 requires land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or

administrative procedures that manage the form and relationship of projects and uses. Policy LU-3.3 requires that the scale and massing of new development provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjacent lower density neighborhoods. Policy LU-4.2 directs the development and enforcement of development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic. Policy LU-4.3 requires that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses. Action LU-3a directs the City to prepare and adopt Objective Design Standards applicable to all new multi-family residential and mixed-use development. Action LU-3b ensures all projects are reviewed and processed per CEQA Guidelines. Action LU-4e implements the City's existing development standards, or where not in place, creates new standards (either through an update to the Zoning Code or update to the Hawthorne Boulevard Specific Plan or other regulating tool) to regulate new construction and revisions to existing buildings. In particular, new development standards would be created for higher density stand-alone residential projects and mixed-use projects to ensure that quality infill developments can be created within the areas identified for focused growth.

Although the potential for new residential development at higher densities could occur within the Planning Area, scenic vistas and resources do not readily occur within the Planning Area and long-range views are limited due to the existing topography and urbanized nature of the area. Thus, the Project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.3: Code Compliance. Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.5: Scale and Massing. Require that the scale and massing of new development provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjacent lower density neighborhoods.

Action LU-3a: Prepare and adopt Objective Design Standards applicable to all new multi-family residential and mixed-use development.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Policy LU-4.2: Standards and Guidelines. Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic.

Policy LU-4.3: Site Planning. Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e: Continue to implement the City's existing development standards, or create new standards, if appropriate, to regulate new construction and revisions to existing buildings. New development standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill development

2. Scenic Resources

Threshold: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Finding: No Impact. (Draft EIR, Impact AES-2, page 5.1-9)

Explanation: There are no Eligible or Designated State Scenic Highways within the Planning Area. The nearest officially designated State Scenic Highway is a portion of State Highway 2, located approximately 25 miles northeast of the Project site. Due to this distance, the Planning Area is not within the viewshed of this State Scenic Highway. The nearest eligible State Scenic Highway is a portion of State Highway 1, located approximately nine miles northwest of the Planning Area. Due to the distance and relatively flat intervening topography, the Planning Area is not within the viewshed of State Highway 1. As there are no officially designated or eligible scenic highways located within the viewshed of the Planning Area, implementation of the General Plan Update would not substantially damage scenic resources within a State scenic highway. No impact would occur in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

3. Visual Character

Threshold: In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Finding: Less than significant. (Draft EIR, Impact AES-3, pages 5.1-9 through 5.1-13)

Explanation: Public Resources Code Section 21071 defines an "Urbanized area" as an incorporated city that meets either of the following criteria: has a population of at least 100,000 persons; or has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. According to the California Department of Finance, the City has a current (2023) population of 30,882. The adjacent City of Torrance has a population of 143,057. Combined, the cities have a population of 173,939, which exceeds 100,000 persons; thus, the City qualifies as being within an "Urbanized Area." Therefore, a significant impact would occur if a future development project associated with implementation of the Project conflicts with applicable zoning and other regulations governing scenic quality.

All construction activities related to the General Plan Update would be temporary in nature and all construction equipment would ultimately be removed from individual project sites following completion of construction activities. Therefore, changes to local visual character and quality associated with construction of future development would be temporary, and impacts would be less than significant.

The General Plan Update would support additional development beyond existing conditions. In general, the General Plan Update Land Use Element proposes an increase in building density and intensity areas along major corridors, including Hawthorne Boulevard, in accordance with State and regional housing and climate change goals. The General Plan Update incorporates consistent and compatible development intensities that would maintain and enhance the overall visual character/quality of the Planning Area. Specifically, the Land Use Element includes policies and actions, maps, and diagrams to control and direct the general distribution, location, and extent of land uses within the Planning Area. For example, Policy LU-1.1 requires the provision of an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures

compatibility between uses consistent with the land use designations identified in the Land Use Element and Land Use Map. Policy LU-4.2 directs the City to develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic. Action LU-1a directs the City to create consistency between the City's Zoning Code and Zoning Map as appropriate to ensure consistency with the Land Use Element and designations shown on the Land Use Map. Action LU-1b ensures the City updates the Hawthorne Boulevard Specific Plan as appropriate to ensure consistency with the Land Use Element, designations shown on the Land Use Map, and the City's adopted 2021-2029 Housing Element. Action LU-1c directs the City to review the Zoning Code and update as appropriate to reflect Land Use goals, policies, and implementation actions included in the General Plan Update. Action LU-4e directs the implementation the City's existing development standards, or where not in place, creates new standards to regulate new construction and revisions to existing buildings. Guiding future growth and development based on the General Plan Update would ensure future development complements and protects the quality of the existing environment.

All future development would also be subject to conformance with applicable requirements in the Lawndale Municipal Code. The City's Zoning Code (Title 17) would regulate maximum building height, building setbacks, parking and garage/carport placement, landscaping and screening requirements, and other development characteristics in place in each zoning district to protect the City's long-term visual character. Pursuant to Chapter 17.30, future residential development projects would be subject to project-specific design review to ensure compatibility with the site surrounding area, and consistency with design standards and guidelines. Future development within the SOI that is under the County's land use control would be subject to the County's entitlement requirements, regulations, and review processes. Additionally, applicable future land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. If necessary, mitigation would be recommended to reduce potential impacts to a less than significant level.

The implementation of policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would be designed to enhance the visual quality of the area and be visually compatible with existing development and open space resources. Therefore, implementation of the General Plan Update would not substantially degrade the existing visual character or quality of public views or conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than

significant in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Action LU-1a: Create consistency between the City's Zoning Code and Zoning Map and General Plan.

Action LU-1b: Update the Hawthorne Boulevard Specific Plan as appropriate to ensure consistency with this Land Use Element, designations shown on Figure LU-1, and the City's adopted 2021-2029 Housing Element.

Action LU-1c: Review the Zoning Code and update as appropriate to reflect Land Use goals, policies, and implementation actions included in this Plan.

Action LU-1d: As part of development review process, ensure that residential and non-residential developments fall within the minimum and maximum density requirements and/or allowed floor-area-ratios stipulated on the Land Use Map and included within the Land Use Descriptions. Projects shall also be reviewed for consistency with the development standards and density requirements established by any applicable Specific Plan governing the area in question.

Policy LU-3.3: Code Compliance. Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.9: Interagency Cooperation. Establish and maintain an ongoing liaison with Caltrans, LA Metro, utility companies, adjacent cities, and other major government and private agencies to help minimize the traffic, noise, and visual impacts of their facilities and operations.

Policy LU-4.2: Standards and Guidelines. Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic.

Policy LU-4.3: Site Planning. Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways)

that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e: Continue to implement the City's existing development standards, or create new standards if appropriate, to regulate new construction and revisions to existing buildings. New standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill developments.

4. Light and Glare

Threshold: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Finding: Less than significant. (Draft EIR, Impact AES-4, pages 5.1-13 through 5.1-14)

Explanation: Future development accommodated through implementation of the General Plan Update could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. Light and glare impacts could result from new light sources such as street lighting, interior and exterior building lighting (including for safety purposes), vehicle headlights, illuminated signage, and new glare sources such as reflective building materials, roofing materials, and windows. All lighting installed in future development projects as a result of the implementation of the General Plan Update would be subject to conformance with applicable Zoning Code requirements and guided by the General Plan Update Land Use Element, which includes policies and actions to reduce potential light and glare impacts. Land Use Element Policy LU-3.7 requires new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control. Action LU-3c directs the City to evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods. Action LU-3d requires that the City review the Zoning Code, and amend it if necessary to create standards addressing appropriate treatments to buffer nonresidential uses from residential and other sensitive uses. Action LU-3e requires as part of the development review process, the analysis of land use compatibility to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks. In addition, pursuant to Section 17.72.071, *Improvement of Parking Areas*, projects abutting a residential zone or residential project must direct lighting to illuminate parking areas away from adjoining residential premises and adequately shield headlight glare. Therefore, implementation of the General Plan Update would not result in adverse light and glare impacts. Impacts would be less than significant in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-3.7: Development Buffers. Require new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Action LU-3d: Review the Zoning Code, and amend it if necessary, to create standards addressing appropriate treatments to buffer nonresidential uses from residential and other sensitive uses.

Action LU-3e: Analyze land use compatibility through the development review process to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.

B. AGRICULTURAL RESOURCES

1. Farmland Conversion

Threshold: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: No Impact. (Draft EIR, Impact AG-1, page 5.2-6)

Explanation: The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Farmland Mapping and Monitoring Program (FMMP) classifies the Planning Area as Urban and Built-Up Land. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP. Additionally, there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map. Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No impact would occur in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

2. Williamson Act Lands

Threshold: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Finding: No Impact. (Draft EIR, Impact AG-2, pages 5.2-6 through 5.2-7)

Explanation: Although the General Plan Update does not include any zone changes at this time, a future zoning update is anticipated to bring zoning into compliance with the General Plan Update. However, since the City does not have any zoning districts exclusive to agriculture uses, the General Plan Update, and subsequent zoning code update, would not conflict with existing zoning for agricultural use.

The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Planning Area does not contain land under agricultural production, nor are any parcels within the Planning Area under a Williamson Act contract. Therefore, the Project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contact. No impact would occur in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

3. Other Changes

Threshold: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Finding: No Impact. (Draft EIR, Impact AG-3, page 5.2-7)

Explanation: There are no forest lands within the Planning Area, nor are there suitable environmental conditions for forest land to be developed; therefore, implementation of the proposed Project will not result in the conversion of forest land to non-forest use.

The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP; there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map; and the Planning Area does not contain land under agricultural production. Thus, the General Plan Update would not result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur in

this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

4. Forestland Zoning and Loss of Forest Land

Threshold: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g), or result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No Impact. (Draft EIR, page 5.2-6)

Explanation: There are no forest lands or timber lands located within the Planning Area. There are also no parcels that are currently zoned as forest land, timber, or timber production. Therefore, implementation of the proposed General Plan Update would have no impact on forest land, timber, or timber production.

C. AIR QUALITY

1. Air Quality Plans

Threshold: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Finding: Less than significant. (Draft EIR, Impact AQ-1, pages 5.3-26 through 5.3-35)

Explanation: The Southern California Air Quality Management District (SCAQMD) has adopted a series of Air Quality Management Plans (AQMPs) to lead the Air Basin into compliance with several criteria air pollutant standards and other Federal requirements, while taking into account construction and operational emissions associated with population and economic growth projections provided by the Southern California Association of Government's (SCAG's) 2020 RTP/SCS. CEQA requires that general plans be evaluated for consistency with the AQMP. Indicators of consistency include control strategies and growth projections.

Construction Emissions

Future development of individual projects under the General Plan Update would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the ATCM to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, and with SCAQMD's regulations such as Rule

403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, as applicable to the type of growth, individual projects under the proposed General Plan Update would comply with fleet rules to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 (CARB Truck and Bus regulation)). Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Therefore, the construction anticipated by the proposed would be consistent with the AQMP under the control strategies indicator.

Implementation of the General Plan Update would result in an increase in short-term employment compared to existing conditions. However, these jobs would be temporary in nature. Therefore, the construction jobs generated by future development accommodated by the General Plan Update would not conflict with the long-term employment or population projections upon which the AQMPs are based.

Operational Emissions

Future development under the General Plan Update would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and, to the extent applicable, the 2020 RTP/SCS.

Additionally, the location, design, and land uses of the growth anticipated by the General Plan Update would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing commercial and residential density near public transit. The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area. The availability of public transportation and the focus on increasing density relative to the existing public transportation, enables implementation of the General Plan Update to potentially reduce vehicle trips, VMT, and associated transportation-related emissions per capita, compared to the existing conditions. Therefore, the proposed Project would be consistent with the AQMP under the control strategies indicator.

Future development in the City of Lawndale that is consistent with the General Plan Update could increase vehicle trips and VMT that would result in emissions of ozone precursors and particulate matter. Individual projects under the General Plan Update would be required to undergo subsequent environmental review pursuant to CEQA, and would be required to demonstrate compliance with the AQMP. Individual projects would also be required to demonstrate compliance with SCAQMD rules and regulations governing air quality

The City of San Lawndale continues to coordinate with SCAQMD and SCAG to ensure Citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Additionally, the General Plan Update includes policies and actions to further minimize potential impacts to air quality in support of the AQMP. The proposed Resource Management Element includes Goal RM-4 of the General Plan Update Resources Management Element addresses potential air quality impacts by improving air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions. Also, Policy LU-1.1 of the General Plan Update Land Use Element promotes a land use pattern that would reduce pollution and air quality impacts. Therefore, the operation of the proposed General Plan Update would not conflict with or obstruct the implementation of the applicable air quality plan and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.4: Commercial Corridors. Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

Policy LU-1.6: Uses to Meet Daily Needs. Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

MOBILITY ELEMENT

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Action M-3a When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Action M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.3: Hawthorne Boulevard Sidewalks. Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.
Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.2: Transportation Demand Management. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Action M-9b Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: Air Quality and Greenhouse Gas Emissions. Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: Regional Cooperation. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: Measurement and Enforcement. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: GHG Emissions. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: Sensitive Receptors. Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: GHG Reduction. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: Mitigation. Public Engagement. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet EPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NO_X emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: Energy Resources. A community that safely manages its energy resources.

Policy RM-5.1: Compliance with State Legislation. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: Green Building Standards Code. Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: Renewable Energy. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: Energy Needs. Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: Business Community. Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: Public Education. Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: Promote Energy Conservation in Existing Building Stock. Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

2. Other Adverse Emissions

Threshold: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Finding: Less than significant. (Draft EIR, Impact AQ-4, pages 5.3-42 through 5.3-43)

Explanation: According to the SCAQMD's *CEQA Air Quality Handbook*, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. Future development accommodated by the General Plan Update would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. Construction of future development would not be expected to generate nuisance odors at nearby air quality sensitive receptors. Therefore, impacts with respect to odors would be less than significant.

According to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Potential operational airborne odors could be created by commercial and industrial uses developed under the General Plan Update. However, compliance with the City's Municipal Code, including Section 6.24.040 which prohibits animal premises from being a source of offensive odors, and SCAQMD's Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds would reduce potential impacts. The other potential source of odors would be new waste receptacles within the Planning Area. The receptacles would be stored in areas and in containers, as required by City Municipal Code Chapter 8.32, *Garbage Collection and Disposal*, and be emptied on a regular basis, before potentially substantial odors have developed. Additionally, the policies included as part of the General Plan Update would reduce mobile and stationary source emissions and odors associated with diesel fuel by focusing on land use patterns that improve air quality, reduce air pollution from stationary sources, and encourage/enable increased transit behavior. Consequently, implementation of the General Plan Update would not create operational-related objectionable odors affecting a substantial number of people within the City. Impacts would be less than significant in this regard.

D. BIOLOGICAL RESOURCES

1. Candidate, Sensitive, or Special Status Species

Threshold: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or

regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Finding: Less than significant. (Draft EIR, Impact BIO-1, pages 5.4-12 through 5.4-14)

Explanation: The Planning Area is located within an urbanized area and currently developed with residential and non-residential land uses. Pursuant to the special-status species search, four special-status plant species and nine special-status animal species have been identified within one mile of the Planning Area and are considered candidate, sensitive, or special status under FESA, CESA and/or CNPS/CRPR designation. There are no sensitive natural communities within the nine-quad search area.

Implementation of the General Plan Update would result in new development and intensification of existing urban uses primarily along major corridors including Hawthorne Boulevard and Redondo Beach Boulevard. The Project would redesignate seven acres of land which are existing public-school sites designated as Open Space in the 1992 General Plan to the Public Facilities land use designation. The General Plan Update would not modify the Open Space Land Use designation and would continue to provide for public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas. While the Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources, subsequent development projects under the proposed General Plan Update could result in direct impacts to certain species found present on an individual project site. For instance, future development within the City could involve the removal of trees, which may have the potential to impact nesting migratory birds. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements for removal. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects

Compliance with applicable regulations at the time of future development would minimize adverse impacts to sensitive species. Additionally, the General Plan Update includes policies and actions to preserve and protect biological resources within the Planning Area. The proposed Resource Management Element Policy RM-1.1 requires that the City provide for public recreational lands, trails, and open space. Policy RM-1.3 requires new residential development to incorporate on-site open areas or greenspace for resident use. Policy RM-1.7 directs the City to provide for the use of street trees along sidewalks and property frontages, consistent with the City's Master Street Tree program. Policy RM-1.8 encourages the

development of innovative non-traditional public and semi-public open space such as community gardens, parkways, and green space. Action RM-1b directs the City to pursue funding for parkland acquisition, development, and maintenance. Action RM-1c directs the City to prepare and adopt a Master Parks Plan to set policies and standards for City parks and open space. Policy RM-6.3 encourages the City to work with the Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. The proposed Public Safety Element Policy PS-7.3 directs the City to coordinate with Federal, State, and local agencies to establish ecological recovery programs. Adherence to these policies and actions during the discretionary review of future development projects would serve to minimize impacts to sensitive species. Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to sensitive species to a less than significant level.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Goal RM-1: Parks, Recreation and Open Space. A community with attractive, safe and accessible parks, recreation, and open space areas.

Policy RM-1.1: Recreation Types. Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.3: Open Space for Private Developments. Require new private residential development to incorporate on-site open areas, greenspace, or recreational facilities for resident use.

Policy RM-1.7: Street Trees. Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

Policy RM-1.8: Creative Open Space and Parks. Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-6.3: Riparian Habitat. Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-7.3: Ecological Recovery. Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

2. Riparian Habitat & Wetlands

Threshold: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Would the project have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Finding: Less than significant. (Draft EIR, Impact BIO-2, pages 5.4-14 through 5.4-16)

Explanation: The Planning Area is largely built-out and consists of a mixture of impervious surfaces and native and non-native species, typical of urban habitats. There are no sensitive natural communities within the nine-quad search area according to the California Natural Diversity Database. While not always documented as a sensitive natural community, streams, rivers, wet meadows, and vernal pools are of high concern because they provide unique aquatic habitat for many endemic species, including special status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the Clean Water Act. There are no large water bodies or creeks within the Planning Area and no known vernal pools have been identified. A portion of the Dominguez Channel, a 15.7-mile-long channelized watercourse, flows through the eastern portion of the Planning Area. No other aquatic resources exist within the Planning Area.

The General Plan Update is a planning document that enables additional development consistent with the proposed Land Use Map, but does not include any site-specific development proposals; therefore, adoption of the General Plan Update would not directly impact the environment. However, the Project could have an indirect change on the physical environment through subsequently approved projects that are consistent with the buildout under the General Plan Update. Individual projects within the Planning Area would require a detailed and site-specific review of the site to determine the presence or absence of water features. If water features are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process. Additionally, the General Plan Update Resource Management Element includes policies and actions intended to protect sensitive natural communities and aquatic resources from adverse effects associated with future development and improvement projects within the Planning Area. The proposed Resource Management Element Policy RM-6.3 directs the City to work with the Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels, such as the Dominguez Channel. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment.

Adherence to these policies and actions during the discretionary review of future development projects would serve to minimize impacts to sensitive species.

Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to aquatic resources to a less than significant level. Thus, the Project would not have a substantial adverse effect on sensitive natural communities, including riparian habitat, or on State or Federally protected wetlands and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.3: Riparian Habitat. Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

3. Wildlife Movement

Threshold: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Finding: Less than significant. (Draft EIR, Impact BIO-3, pages 5.4-16 through 5.4-18)

Explanation: The City and surrounding area are highly urbanized and generally developed with urban uses. The Planning Area consists of developed and/or disturbed land that has been developed, paved, or landscaped, and existing

vegetation consists of primarily ornamental and/or nonnative plant species. Thus, the Planning Area does not provide for habitat linkages. The portion of the Dominguez Channel that flows through the eastern portion of the Planning Area is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project does not propose site-specific development activities, nor does it involve any changes or modifications to the channel. Thus, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

The proposed General Plan Resource Management Element includes policies and actions intended to preserve ecological and biological resources. The proposed Resource Management Element Policy RM-1.1 directs the City to provide for public recreational lands, trails, and open space. Policy RM-1.3 requires new residential development to incorporate on-site open areas or greenspace for resident use. Policy RM-1.7 directs the City to provide for the use of street trees along sidewalks and property frontages, consistent with the City's Master Street Tree program. Policy RM-1.8 encourages the development of innovative non-traditional public and semi-public open space such as community gardens, parkways, and green space. Action RM-1b encourages the City to pursue funding for parkland acquisition, development, and maintenance. Action RM-1c directs the City to prepare and adopt a Master Parks Plan to set policies and standards for City parks and open space. Policy RM-6.3 directs the City to work with Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. The proposed Public Safety Element Policy PS-7.3 directs the City to coordinate with Federal, State, and local agencies to establish ecological recovery programs. Adherence to these policies and actions would serve to protect potential biological resources and provide for trees and other vegetation consistent with wildlife habitat recovery. Thus, through compliance with Federal, State, and local regulations, and General Plan Update goals, policies, and actions, future development under the General Plan Update would have a less than significant impact associated with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Goal RM-1: Parks, Recreation and Open Space. A community with attractive, safe and accessible parks, recreation, and open space areas.

Policy RM-1.1: Recreation Types. Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.3: Open Space for Private Developments. Require new private residential development to incorporate on-site open areas, greenspace, or recreational facilities for resident use.

Policy RM-1.7: Street Trees. Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

Policy RM-1.8: Creative Open Space and Parks. Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-6.3: Riparian Habitat. Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-7.3: Ecological Recovery. Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

4. Local Policies and Ordinances

Threshold: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Finding: Less than significant. (Draft EIR, Impact BIO-4, page 5.4-18 through 5.4-19)

Explanation: Future development under the General Plan Update would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources as outlined above. The City does not have a tree preservation policy or ordinance; however, Lawndale Municipal Code Chapter 12.28, *Street Trees*, addresses the City's tree planting and master street tree plan and requires authorization for the planting, spraying, pruning, or removal of street trees or trees on public property. In addition, the General Plan Resource Management Element includes policies and actions intended to provide for additional trees within the City. For instance, Policy RM-1.7 requires the City to provide for the use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program. Future development projects would be assessed for consistency with the Lawndale Municipal Code and General Plan Update goals, policies, and actions. Thus, the General Plan Update would not conflict with any local policies or ordinances protecting biological resources and impacts would be less than significant tin this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.7: Street Trees. Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

5. Habitat Conservation Plans

Threshold: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Finding: No impact. (Draft EIR, Impact BIO-5, pages 5.4-19)

Explanation: The Planning Area is urbanized and is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Thus, the Project would not conflict with any of these plans and no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no General Plan Update goals, policies, or actions specific to habitat conservation plans.

E. CULTURAL RESOURCES

1. Historical Resources

Threshold: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines, § 15064.5?

Finding: Less than significant. (Draft EIR, Impact CUL-1, pages 5.5-11 through 5.5-13)

Explanation: Known historic resource sites are located throughout the Planning Area and undiscovered or potentially eligible sites may be located in various areas of the Planning Area. According to officially recorded resources and other databases that were researched for the Project, 25 historic built environment resources are located within the City. While the General Plan Update does not directly propose any changes to any historic resources, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including historical resources. Proposed Policy RM-3.1 requires the City to protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-

3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.4 directs the City to include the public in efforts to preserve cultural assets, including techniques, incentives, and legal requirements for preservation. Policy RM-3.6 directs the City to evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures. Policy RM-3.7 encourages the City to seek funding and support from public and private sources that aim to protect cultural and historic resources within the City. Action RM-3a requires the assessment of development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3b directs the City to evaluate the feasibility of implementing a local historic registry program that provides incentives for retrofitting and building maintenance, as well as public recognition, of the local resource. Action RM-3c directs the City to consider conducting a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance. Action RM-3d requires, for structures that potentially have historic significance, that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings or relocating the historic building as feasible.

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations relative to historic and potentially historic resources. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. For structures that potentially have historical significance, the City would require preparation of a study by a qualified professional archaeologist or historian to determine the significance of the structure and potential impacts of the proposed development in compliance with CEQA. Therefore, compliance with the General Plan Update policies and actions and existing regulations, would not cause a substantial adverse change in the significance of a historical resource and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: Documentation. Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.3: Cultural Reminders. Seek to incorporate reminders of the City's culture through adaptive reuse, signage, markers, cultural events, and other reminders of Lawndale's community identity and local history.

Policy RM-3.4: Public Education. Educate and actively involve the public in preserving cultural assets, including techniques, incentives, and legal requirements for preservation.

Policy RM-3.6: Historic Preservation. Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

Policy RM-3.7: Funding. With input and involvement of stakeholder groups, seek adequate funding and support from public and private sources that aim to protect cultural and historic resources within the City.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3b: Evaluate the feasibility of implementing a local historic registry program that provides incentives for retrofitting and building maintenance, as well as public recognition, of the local resource.

Action RM-3c: Consider conducting a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance.

Action RM-3d: For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings or relocating the historic building as feasible.

Action RM-3e: For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

2. Archeological Resources

Threshold: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Finding: Less than significant. (Draft EIR, Impact CUL-2, pages 5.5-13 through 5.5-14)

Explanation: Although the records search conducted as part of the Project identifies no previously-recorded archaeological resources within the City, the Cultural Study concludes the lack of identifies resources is likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites. Effects on archaeological resources deemed to be significant could be considered adverse if they involve physical demolition, destruction, or alteration of the resource or its immediate surroundings such that the significance of a resource would be materially impaired. While the General Plan Update does not directly propose site-specific development with the potential to directly impact archaeological resources, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of previously undiscovered archaeological resources.

The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including archaeological resources. Proposed Policy RM-3.1 requires the City protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.4 directs the City to include the public in efforts to preserve cultural assets, including techniques, incentives, and legal requirements for preservation. Policy RM-3.7 encourages the City to seek funding and support from public and private sources that aim to protect cultural and historic resources within the City. Action RM-3a requires that development proposals be assessed for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3e requires, for all development proposals within areas with the potential to contain

prehistoric/historic resources, a study to be conducted by a professional archaeologist to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Archaeological resources are protected under Federal, State, and local regulations and implementation of General Plan Update policies and actions would reduce potential adverse impacts to archaeological resources associated with future development. Subsequent discretionary development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of an archaeological resource and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: Documentation. Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.4: Public Education. Educate and actively involve the public in preserving cultural assets, including techniques, incentives, and legal requirements for preservation.

Policy RM-3.7: Funding. With input and involvement of stakeholder groups, seek adequate funding and support from public and private sources that aim to protect cultural and historic resources within the City.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3e: For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be

modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

3. Human Remains

Threshold: Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Finding: Less than significant. (Draft EIR, Impact CUL-3, pages 5.5-16 through 5.5-17)

Explanation: Future construction projects within the Planning Area could have the potential to disturb or destroy buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations. Subsequent discretionary development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. The General Plan Update Resource Management Element includes policies and actions addressing the potential discovery of human remains. Proposed Policy RM-3.1 requires the City protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.5 requires consultation with Native American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Action RM-3g requires, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, that the City halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains is permitted until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site. Compliance with the General Plan Update policies and actions and existing regulations, including Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98, would ensure that potential impacts associated with the inadvertent discovery of human remains would be reduced to less than

significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.5: Tribal Consultation. In accordance with State, local, and Tribal intergovernmental consultation requirements, consult with Native American tribes that may be impacted by proposed development and land use policy changes, as necessary.

Action RM-3g: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

F. ENERGY

1. Energy

Threshold: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Finding: Less than significant. (Draft EIR, Impact EN-1 pages 5.6-9 through 5.6-18)

Explanation: Buildout of the General Plan Update would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel), and from off-road construction activities (e.g. diesel fuel) associated with 2045 buildout of the General Plan Update. Each of these activities would require the use of energy resources. Developers of individual projects within the Planning Area would be responsible for conserving energy, to the extent feasible, and would rely heavily on reducing per capita energy consumption to achieve this goal,

including through Statewide and local measures. Buildout of the General Plan Update would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. The General Plan Update would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. This is a less than significant impact in this regard.

The General Plan Update includes policies and actions to support energy conservation and renewable energy, as well as reducing energy use. Specifically, Goal RM-5 promotes a community that safely manages its energy resources. Policy RM-5.1 requires the City to comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy. Policy RM-5.2 ensures that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code. Policy RM-5.3 requires the City to promote the development and use of renewable energy resources to reduce dependency on fossil fuels. Policy RM-5.4 requires the City to promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure. Policy RM-5.5 requires the City to promote energy conservation and recycling by the public and private sectors. Policy RM-5.6 requires the City to collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways. Policy RM-5.7 requires the City to support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations. Policy RM-5.8 requires the City to promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy. Policy RM-5.9 requires the City to promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers. Action RM-5a requires the City to implement energy conservation measures in public buildings through the following actions. Action RM-5b requires that during the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design. Action RM-5 requires the City to continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code. Action RM-5d requires the City to promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings. Action RM-5e requires the City to identify and reduce

government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times. Action RM-5f requires the City to consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives. Action RM-5g requires the City to use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs. Further, Action RM-5h requires the City to partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

As a result, the General Plan Update would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for during General Plan Update buildout, including during construction, operations, maintenance, and/or removal. The City of Lawndale would comply with all existing energy standards and would not result in significant adverse impacts on energy resources. For the reasons stated above, buildout of the General Plan Update would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This is a less than significant impact.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: Air Quality and Greenhouse Gas Emissions. Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: Regional Cooperation. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: Measurement and Enforcement. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: GHG Emissions. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: Sensitive Receptors. Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: GHG Reduction. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: Public Engagement. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.

2. Potential exposure of sensitive receptors to toxic air contaminants.

3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.

4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet EPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel

Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NOx emissions during construction activities.

- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: Energy Resources. A community that safely manages its energy resources.

Policy RM-5.1: Compliance with State Legislation. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: Green Building Standards Code. Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: Renewable Energy. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: Energy Needs. Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: Business Community. Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: Public Education. Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: Promote Energy Conservation in Existing Building Stock. Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

G. GEOLOGY AND SOILS

1. Seismic Hazards

Threshold: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?

Finding: Less than significant. (Draft EIR, Impact GS-1 pages 5.7-14 through 5.7-16)

Explanation: The Planning Area is situated within a seismically active region as the result of being located near the active margin between the North American and Pacific tectonic plates. There are no designated Alquist-Priolo fault zones within the Planning Area. While there are no major active faults within the Planning Area, major active and potentially active faults exist in the vicinity of the Planning Area, including the Newport-Inglewood Fault, San Andreas Fault, and Palos Verdes Fault. There are no areas within the Planning Area designated by the California Geological Survey as having the potential for liquefaction. Further, the City's LHMP does not identify the Planning Area as being located within an area that is susceptible to liquefaction. Additionally, there are no earthquake-induced landslide seismic hazard zones mapped within the Planning Area.

Future development projects would be required to comply with the provisions of the California Building Standards Code (CBSC), which requires development projects to perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code, and other regulations. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan Update Public Safety Element includes goals, policies and actions to address potential impacts associated with seismic activity. Policy PS-2.1 requires that geotechnical hazard data is incorporated into in future land use decision-making, site design, and construction standards. Policy PS-2.2 requires the enforcement of State

seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 ensures that mitigation measures are monitored and enforced to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Policy PS-2.4 encourages the City to educate the community to mitigate potential injury and damage associated with earthquakes. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Action PS-2c ensures adoption and implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e requires feasible mitigation measures for development projects to reduce the risk to the community from hazards related to geologic conditions and seismic activity.

Future development projects associated with implementation of the General Plan Update would be reviewed to identify and assess seismic safety issues and would be required to design and construct improvements in compliance with the applicable building codes and standards in place at the time to reduce the potential adverse effects associate with strong seismic ground shaking. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with strong seismic ground shaking would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-2: Geologic and Seismic Hazards. A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: Geologic Hazard Identification. Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: Earthquake Protection. Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: Development Projects. Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Policy PS-2.4: Seismic Hazard Education. Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

2. Soil Erosion

Threshold: Would the project result in substantial soil erosion or the loss of topsoil?

Finding: Less than significant. (Draft EIR, Impact GS-2, pages 5.7-16 through 5.67-18)

Explanation: Implementation of the General Plan Update would provide for development and improvement projects that would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code, and other relevant regulations. In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a stormwater pollution prevention and monitoring plan (SWPPP), which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Further, the General Plan Update includes a range of policies and actions related to best management practices, NPDES requirements, and minimizing discharge of materials (including eroded soils) into the storm drain system. Proposed Resource Management Element Policy RM-6-2 encourages all landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6a requires new development and redevelopment projects to implement BMPs to reduce soil erosion and pollutants in urban runoff. Proposed Public Safety Element Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. With the implementation of the policies and actions in the General Plan Update, as

well as applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Policy PS-5.4: Best Management Practices. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.6: Local Storm Drainage Infrastructure. Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

3. Unstable Soils

Threshold: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result

in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Finding: Less than significant (Draft EIR, Impact GS-3, pages 5.7-18 through 5.7-21)

Explanation: Future development anticipated by the General Plan Update could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with ground instability or failure. The Planning Area is not susceptible to lateral spreading, subsidence, or liquefaction. The potential for landslide within the Planning Area is low. The General Plan Update includes policies and actions to address geologic conditions within the Planning Area. Public Safety Element Policy PS-2.1 requires that geotechnical hazard data be incorporated in future land use decision-making, site design, and construction standards. Policy PS-2.2 enforces State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 requires mitigation measures be monitored and enforced to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Policy PS-2.4 encourages the City to educate the community to mitigate potential injury and damage associated with earthquakes. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Action PS-2c ensures adoption and implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e requires feasible mitigation on development projects to reduce the risk to the community from hazards related to geologic conditions and seismic activity

Future development and improvement projects would be required to prepare site-specific geotechnical studies to identify geologic and soil conditions specific to the site and provide design recommendations consistent with the requirements of State and City codes. Implementation of CBSC and the Municipal Code requirements related to seismic and geologic conditions and the General Plan Update policies and actions would ensure that future development projects are evaluated for potential geologic and seismic risks

and that potential risks are adequately addressed. With the implementation of the policies and actions in the General Plan Update, as well as applicable State and City codes, potential impacts associated with unstable geologic conditions would be reduced to less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-2: Geologic and Seismic Hazards. A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: Geologic Hazard Identification. Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: Earthquake Protection. Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: Development Projects. Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Policy PS-2.4: Seismic Hazard Education. Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the

California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

4. Expansive Soils

Threshold: Would the project be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Finding: Less than significant. (Draft EIR, Impact GS-4, pages 5.7-21 through 5.7-23)

Explanation: The majority of the Planning Area has 'Low to Medium' expansive soils. The areas with 'Low to High' expansive soils are in proximity to Dominguez Channel, within the City's Sphere of Influence. The proposed Public Safety Element of the General Plan Update includes policies and actions that are designed to protect the City from geologic hazards, including expansive soils. Policy PS-2.1 incorporates geotechnical hazard data in future land use decision-making, site design, and construction standards. Policy PS-2.2 enforces State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 monitors and enforces mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Action PS-2c ensures adoption and implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e reduces the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects.

Future development and infrastructure projects considered by the City, would be evaluated for conformance with the CBSC, the General Plan Update policies and actions, Lawndale Municipal Code, and other regulations. Subsequent development and infrastructure projects requiring discretionary review would also be analyzed for potential environmental

impacts, consistent with the requirements of CEQA. Future development and improvement projects would be required to prepare site-specific geotechnical studies to identify geologic and soil conditions specific to the site, including the potential for expansive soils. A site-specific geotechnical investigation would identify the potential for damage related to expansive soils and non-uniformly compacted fill and engineered fill. If a risk is identified, design criteria and specification options may include removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements. Design criteria and specifications set forth in the design-level geotechnical investigation would ensure impacts from problematic soils are minimized. Thus, implementation of CBSC and the Municipal Code requirements related to on-site soil conditions and the General Plan Update policies and actions would ensure that future development projects are evaluated for potential risks associated with development on expansive soils, and that potential risks are adequately addressed. Therefore, this impact is considered less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-2: Geologic and Seismic Hazards. A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: Geologic Hazard Identification. Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: Earthquake Protection. Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: Development Projects. Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

5. Septic Tanks

Threshold: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Finding: Less than significant. (Draft EIR, Impact GS-5, pages 5.7-23)

Explanation: Wastewater service is provided to the Planning Area by the City and the Los Angeles County Sanitation Districts (LACSD). Local wastewater produced in the City connects to sewer mains maintained by the LACSD. LACSD owns, operates, and maintains sewer lines that form the backbone of the regional wastewater conveyance system. Future development within the Planning Area would be required to connect to the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. As such, no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no General Plan Update goals, policies, or actions specific to septic tanks or alternative waste water disposal systems.

6. Paleontological Resources

Threshold: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Less than significant. (Draft EIR, Impact GS-6, pages 5.7-23 through 5.7-25)

Explanation: The City is underlain by two geologic units (Old alluvium and Old eolian deposits) that are considered to have a high paleontological sensitivity at surface and at depth. Although fossil localities have not been recorded within the Planning Area, deposits from the Pleistocene Epoch have produced two fossil localities within three miles of the Planning Area. Therefore, it is possible that undiscovered paleontological resources could

be encountered during ground-disturbing activities. Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, State, or Federal criteria. The proposed General Plan Update Resource Management Element includes policies and actions to protect significant paleontological resources within the Planning Area. Policy RM-3.1 requires the protection areas containing paleontological resources. Action RM-3a requires the City assess development proposals for potential impacts to sensitive historic, archaeological, and paleontological resources pursuant to CEQA. Action RM-3f requires an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to CEQA. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

With implementation of the General Plan Update policies and actions, potential impacts to paleontological resources associated with future development anticipated by the General Plan Update would be reduced to less than significant

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3f: The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

H. HAZARDS AND HAZARDOUS MATERIALS

1. Transport, Use, and Disposal of Hazardous Materials

Threshold: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Finding: Less than significant. (Draft EIR, Impact HAZ-1, pages 5.9-14 through 5.9-19)

Explanation: Implementation of the General Plan Update would accommodate the future development of both residential and non-residential uses within the Planning Area. Increased development could result in an increase in the routine transport, use, and storage of hazardous materials in the City, potentially resulting in accidental releases. Exposure of persons to hazardous materials could also occur through the operations of future developments associated with the improper handling of hazardous materials/wastes; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The use, transportation, and disposal of hazardous materials is regulated and monitored by local fire departments, CUPAs, Cal OSHA, and the DTSC consistent with the requirements of Federal, State, and local regulations and policies. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and actions to address potential impacts associated with hazardous materials among other issues. Proposed Mobility Element Policy M-7.1 directs the City to maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads. Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the Los Angeles County Fire Department (LACoFD) to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous

materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 encourages the City to educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c protects the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. The General Plan Update also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance. Policy PS-1.3 requires the implementation emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.5 directs the City to support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1b directs the City to implement and update (as necessary) the City's EOP. Compliance with the requirements of Federal, State, and local laws and regulations regarding the use and storage of hazardous materials would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the General Plan Update would be less than significant

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

MOBILITY ELEMENT

Policy M-7.1: Local Truck Routes. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: Hazardous Waste. Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-1: Emergency Operations. A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.1: Citywide Safety. Support projects, programs, policies, and regulations that help to mitigate potential impacts associated with natural and man-made hazards.

Policy PS-1.2: Critical Facilities. Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: Emergency Preparedness and Response. Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: Local Hazard Mitigation. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: Resources. Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Policy PS-1.6: Emergency Access. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-1.7: Public Safety Education. Promote public safety education programs to educate on emergency preparedness, reduce accidents, injuries, and fires, and to train members of the public to respond to emergencies.

Policy PS-1.8: Cooperation. Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

Action PS-1a: Regularly review and coordinate emergency response procedures with Los Angeles County and State emergency response procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Action PS-1c: Continue to implement and update (at least every five years) the City's Local Hazard Mitigation Plan.

Action PS-1d: Coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Action PS-1f: Promote after school programs, volunteer programs, and Business and Neighborhood Watch programs to help maintain a safe environment.

Goal PS-3: Hazardous Materials. A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: Compatible Land Uses. Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: Safe Residential Uses. Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: Emergency Operations. Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: Cleanup Sites. Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: Monitoring. Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: Transportation. Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: Pipelines. Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: Rail Lines. Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: Public Education. Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

2. Hazardous Materials Release

Threshold: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Finding: Less than significant. (Draft EIR, Impact HAZ-2, pages 5.9-19 through 5.9-24)

Explanation: *Short-Term Construction-Related Accidental Release of Hazardous Materials*

The General Plan Update would enable development of new residential and non-residential uses within the Planning Area. Construction activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment. Future development accommodated through implementation of the General Plan Update could involve the demolition of existing structures and buildings as areas within the City are redeveloped. The presence of lead-based paint, asbestos-containing materials (ACM), and/or other contaminants are likely present in some structures. All demolition that could result in the release of ACMs or lead-based paint would be conducted according to federal and State regulations. In accordance with SCAQMD Rule 1403, if ACM material is found, abatement of asbestos would be required prior to any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional in accordance with California Code of Regulations Title 8, Section 1532.1. If lead-based paint is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Compliance with existing regulations related to ACM and lead-based paint would reduce potential impacts to a less than significant level.

Future development accommodated through implementation of the General Plan Update could involve grading and excavation activities which could expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater. The public could also be exposed to hazardous materials if new development or redevelopment were to be located on a current or historical hazardous material site. Future development associated with implementation of the General Plan Update would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB. In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and actions to address potential impacts associated with potentially contaminated sites. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs

the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Compliance with General Plan Update goals, policies, and actions, and existing regulations would reduce potential impacts involving the release of hazardous materials into the environment as a result of on-site contamination to a less than significant level.

Long-Term Operations-Related Accidental Release of Hazardous Materials

Long-term operation activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment. The transport, storage, and handling of hazardous materials by developers, contractors, business owners, and others are required to comply with Federal, State, and local regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits from the EPA under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, the hazardous materials regulations included in Federal law govern the transportation of hazardous materials. Locally, the LACoFD Health Hazardous Materials Division is the CUPA for Los Angeles County and is responsible for consolidating, coordinating, and making consistent the administrative requirements, permits, inspections, and enforcement activities of State standards regarding the transportation, use, and disposal of hazardous materials in Los Angeles County, including the Planning Area. The General Plan Update includes policies and actions to address potential accidental exposure of individuals as a consequence of unknown existing environmental contaminants. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 coordinates with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers

coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 encourages the City to educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. Proposed Resource Management Element Policy RM-2.3 promotes the proper disposal of hazardous waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal. Mobility Element Policy M-7.1 directs the City to maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads. Compliance with all applicable Federal, State, and local laws related to the transport, storage, and handling of hazardous materials would reduce the likelihood and severity of accidents, and impacts involving the release of hazardous materials into the environment would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

MOBILITY ELEMENT

Policy M-7.1: Local Truck Routes. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: Hazardous Waste. Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-3: Hazardous Materials. A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: Compatible Land Uses. Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: Safe Residential Uses. Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: Emergency Operations. Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: Cleanup Sites. Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: Monitoring. Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: Transportation. Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: Pipelines. Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: Rail Lines. Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: Public Education. Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

3. Hazards Near Schools

Threshold: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Finding: Less than significant. (Draft EIR, Impact HAZ-3, pages 5.9-24 through 5.9-27)

Explanation: Future development within the Planning Area could potentially emit or handle hazardous materials within one-quarter mile of an existing or proposed school. In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and

actions to address potential impacts associated with hazardous materials. Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 educates residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. Mobility Element Action M-7a directs the City to review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the

City. Implementation of the safety procedures and regulations mandated by applicable Federal, State, and local laws and the General Plan Update policies and actions would ensure that potential risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes in proximity to a school associated with implementation of the General Plan Update would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

MOBILITY ELEMENT

Policy M-7.1: Local Truck Routes. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: Hazardous Waste. Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-3: Hazardous Materials. A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: Compatible Land Uses. Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: Safe Residential Uses. Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: Emergency Operations. Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: Cleanup Sites. Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: Monitoring. Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: Transportation. Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: Pipelines. Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: Rail Lines. Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: Public Education. Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

4. Waste Sites

Threshold: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Finding: Less than significant. (Draft EIR, Impact HAZ-4, pages 5.9-27 through 5.9-29)

Explanation: There are no active hazardous waste facilities cleanup sites within the Planning Area listed in the EnviroStor database. There are three open LUST sites undergoing remediation within the Planning Area. Additionally, the Planning Area contains one active facility listed in the SWIS database. These sites comprise the Cortese list, compiled pursuant to Government Code Section 65962.5. Future development associated with implementation of the General Plan Update would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the DTSC and the Los Angeles RWQCB prior to construction. The General Plan Update includes policies and actions to address potential impacts associated with hazardous materials sites. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Compliance with General Plan Update goals, policies, and actions, and existing regulations would reduce potential impacts involving the hazardous materials sites.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-3: Hazardous Materials. A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: Compatible Land Uses. Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: Safe Residential Uses. Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: Emergency Operations. Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: Cleanup Sites. Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: Monitoring. Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

5. Public Airports

Threshold: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Finding: Less than significant. (Draft EIR, Impact HAZ-5, pages 5.9-29)

Explanation: There are no airports within the Planning Area. The closest airports to the Planning Area are the Hawthorne Municipal Airport, located approximately 1.5 miles to the northeast, and LAX, located approximately 2.5 miles to the northwest. According to the Los Angeles County ALUC, Lawndale is not located within the Hawthorne Municipal Airport Influence Area or the LAX Airport Influence Area. While the Planning Area is within two miles of a public use airport, it is not within the area identified in an airport land use plan as being adversely affected (i.e., within the Airport Influence Area). As such, impacts with regard to safety hazards to people residing or working in the Planning Area would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no General Plan Update goals, policies, or actions specific to airports

6. Emergency Plans

Threshold: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: Less than significant. (Draft EIR, Impact HAZ-6, pages 5.9-29 through 5.9-32)

Explanation: The General Plan Update would allow a variety of new residential and non-residential development, which would result in increased jobs and population in the Planning Area. The County OAERP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Los Angeles County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. The EOP does not provide a specific evacuation route map, as evacuation measures would be implemented based on the specific emergency and area affected. The General Plan Update incorporates the City's EOP by reference into the City of Lawndale's Public Safety Element

The General Plan Update identifies major arterials as the primary routes for evacuation; however, evacuation routes would depend upon the emergency event and area affected. The General Plan Update includes policies and actions to address emergency response and evacuation. Proposed Public Safety Element Policy PS-1.3 requires the implementation emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.5 encourages the support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1b directs the City to implement and update (as

necessary) the City's EOP.

Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion of such construction. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review the proposed development for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the Fire Department would ensure that construction and operation of future projects associated with implementation of the General Plan Update would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Primary access to all major roads would be maintained during construction of future developments within the Planning Area. As part of the site plan and design review process, future development projects would be reviewed for adequate infrastructure and access as well as consistency with adopted emergency and evacuation plans among many other environmental issues in order to ensure the safety of City residents and the physical environment. Therefore, impacts associated with adopted emergency response or evacuation plans would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-1: Emergency Operations. A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.1: Citywide Safety. Support projects, programs, policies, and regulations that help to mitigate potential impacts associated with natural and man-made hazards.

Policy PS-1.2: Critical Facilities. Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: Emergency Preparedness and Response. Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: Local Hazard Mitigation. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: Resources. Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Policy PS-1.6: Emergency Access. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-1.7: Public Safety Education. Promote public safety education programs to educate on emergency preparedness, reduce accidents, injuries, and fires, and to train members of the public to respond to emergencies.

Policy PS-1.8: Cooperation. Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

Action PS-1a: Regularly review and coordinate emergency response procedures with Los Angeles County and State emergency response procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Action PS-1c: Continue to implement and update (at least every five years) the City's Local Hazard Mitigation Plan.

Action PS-1d: Coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Action PS-1f: Promote after school programs, volunteer programs, and Business and Neighborhood Watch programs to help maintain a safe environment.

7. Wildland Fires

Threshold: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Finding: Less than significant. (Draft EIR, Impact HAZ-7, pages 5.9-32 through 5.9-33)

Explanation: The Planning Area is not located within a designated Fire Hazard Severity Zone (FHSZ) in State Responsibility Areas (SRA) or Local Responsibility Areas (LRA). The Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas.

The General Plan Update Public Safety Element includes goals and policies to address public safety and emergency services, including fire protection services. Proposed Public Safety Element Policy PS-4.1 directs the City to coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Action PS-4a requires all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Future development allowed under the General Plan Update would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with wildland fire hazards as required under CEQA. Therefore, through compliance with existing Federal, State, and local laws and regulations related to wildland fire hazards and implementation of the General Plan Update goals, policies, and actions, impact regarding the exposure of people or structures to significant loss, injury, or death involving wildland fires would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-4: Fire Hazards. A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: Fire Protection Services. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.3: Emergency Access. Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

Policy PS-4.4: Building Fire Codes. Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Policy PS-4.5: Hazard Mitigation Plans. Coordinate with local, State, and Federal agencies to update emergency, evacuation, and hazard mitigation plans, as necessary.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Action PS-4b: Work with LACoFD to disseminate educational programs for residents on fire hazard risks and fire safety measures.

I. HYDROLOGY AND WATER QUALITY

1. Water Quality Standards

Threshold: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Finding: Less than significant. (Draft EIR, Impact HWQ-1, pages 5.10-17 through 5.10-21)

Explanation: Grading, excavation, removal of vegetation cover, and loading activities associated with future construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas. The General Plan Update sets policies and actions for build-out of the City, but it does not envision or authorize any specific development project.

Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future project must include detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction. The RWQCB would require a project-specific SWPPP to be prepared for each future project that disturbs an area one acre or larger. The SWPPPs would include project-specific best management measures that are designed to control drainage and erosion. For projects disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants.

Future development projects within the Planning Area would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Chapter 3.16, which contains a number of requirements to control stormwater pollution, including post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID structural and non-structural BMPs to effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff; source control BMPs prevent runoff contact with pollutant materials that would otherwise be discharged to the MS4; and structural and non-structural BMPs for specific types of uses. Waters that are listed under Section 303(d) of the CWA are known as "impaired." The Planning Area includes a portion of the Dominguez Channel (lined portion above Vermont Avenue), which is listed on the Section 303(d) list as a Category 5 water body. Continued compliance with the Dominguez Channel Watershed Management Area EWMP, which in part requires the implementation of BMPs to reduce discharge of pollutants in stormwater to the maximum extent practicable, would help address water quality priorities and ensure compliance with the established regulatory framework, including the CWA. Storm drain infrastructure in the City is jointly owned and operated by the City and County. The provision and maintenance of stormwater detention facilities, as needed, would reduce runoff rates and peak flows

The General Plan Update proposes goals, policies, and actions that aim to enhance stormwater quality and infiltration, as well as ensure development projects are reviewed to identify potential stormwater and drainage impacts and require development to include measures to confirm off-site runoff is not increased beyond pre-development levels. Proposed Resource Management Element Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Policy RM-6.4 directs the City to work cooperatively with local

water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Proposed Community Facilities Element Policy CF-4.1 encourages LACFCD to maintain sufficient levels of storm drainage service and improve flood control facilities and channel segments. Policy CF-4.2 encourages stormwater to be directed towards permeable surfaces to allow for more percolation of stormwater into the ground. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4d ensures City review of development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, WQMPs, SWPPPs, and to implement BMPs. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards. Through implementation of the General Plan Update policies and actions, implementation of the Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the Dominguez Channel Watershed, future development projects associated with implementation of the General Plan Update would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: Stormwater. Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

COMMUNITY FACILITIES ELEMENT

Policy CF-4.1: Maintain Capacity. Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Policy CF-4.2: Stormwater Runoff. Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: Stormwater Treatments. Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: National Programs. Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

2. Groundwater Supplies

Threshold: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Finding: Less than significant. (Draft EIR, Impact HWQ-2, pages 5.10-21 through 5.10-24)

Explanation: The Planning Area is underlain by the West Coast Basin of the Coastal Plain of the Los Angeles Groundwater Basin. The West Coast Basin is an adjudicated basin; groundwater extraction is monitored by the court-appointed Watermaster, who administers and enforces the terms of the West Coast Basin Judgment and reports annually to the Court on significant groundwater-related events that occur in the Basin. Potable water in the Planning Area is provided by the Golden State Water Company (GSWC) Southwest System. GSWC Southwest uses adjudicated groundwater supplies from the Central Basin and West Coast Basin for use in its service area.

Project implementation would provide opportunities for residential and non-residential development and is expected to result in increased population growth in the Planning Area, and a corresponding increase in the

demand for additional water supplies. However, the West Coast Basin Adjudication and Central Basin Adjudication limit the volumes of water that each party may extract from the respective basin through an Allowed Pumping Allocation (APA). The Watermaster is charged with monitoring and reporting the basins' conditions in order to ensure groundwater overdraft and sea water intrusion do not occur. Although Project implementation could result in an increased demand for water supplies, which have not been accounted for in the Urban Water Management Plan (UWMP), the Project would not cause GSWC to pump additional groundwater supplies beyond its allocation or beyond the APA authorized through the adjudication of each basin. Thus, the Project would not substantially decrease groundwater supplies that would impede sustainable groundwater management of the basin.

Although future development activities have the potential to increase impervious areas, these areas are limited and do not provide for substantial groundwater recharge within the Planning Area. Recharge to the West Coast Basin's groundwater supply is mostly underflow from the Central Basin, through the Newport-Inglewood fault zone, and injection into the West Coast Basin; natural sources of groundwater recharge from percolation of precipitation, irrigation return flow from fields and lawns, and other applied surface waters are relatively minor. Development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Given that future development associated with implementation of the Project would not appreciably add to the volume of imperious surfaces in the Planning Area, potential impacts to groundwater recharge such that the Project may impede sustainable groundwater management of the basin would be less than significant.

The General Plan Update includes policies and actions that support water conservation, groundwater management, and coordination with local water districts when planning for adequate capacity to accommodate future growth. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6b calls for the City to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Under Action RM-6c, the City will work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping;

expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-2.1 directs City coordination with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Action CF-2c directs the City to cooperate with the State, regional, and local water agencies and suppliers to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Implementation of the General Plan policies, combined with continued management of the West Coast and Central Basins, would further ensure that future development anticipated by the General Plan Update would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: Conservation. Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;

- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: Water Supply Needs. Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: Use of Recycled Water. Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: Climate Change Impacts. Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

3. Erosion, Siltation, Flooding, and Runoff

Threshold: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or

provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

Finding: Less than significant. (Draft EIR, Impact HWQ-3, pages 5.10-24 through 5.10-29)

Explanation: *Erosion and Siltation*

Implementation under the General Plan Update would result in new development and redevelopment projects with the potential to increase the area of impervious surfaces and/or result in alteration of existing drainage patterns. Future development under the General Plan Update would be subject to NPDES permit requirements that address the control of erosion and siltation. This includes the Construction General Permit, which requires a SWPPP and the effective implementation of erosion control measures for projects greater than one acre in size (or part of a larger plan of development). The Los Angeles RWQCB conducts inspections and enforces the Construction General Permit at construction sites. Additionally, Lawndale Municipal Code Section 13.12.070 requires applicants for grading or building permits within the City to provide satisfactory proof of compliance with the Construction General Permit, including a SWPPP, when applicable. Applicants that are not required to comply with the Construction General Permit are required to implement a grading and construction activity runoff control program.

Development under the General Plan Update would also be subject to the post-construction requirements of the MS4 NPDES permit. Lawndale Municipal Code Section 13.16.060 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. The SUSMP ensures that implementing project designs have incorporated LID BMPs for the effective treatment of pollutants of concern in stormwater runoff from a design storm event. Section 13.16.070 requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110 requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects.

Further, the General Plan Update Public Safety Element and Resource Management Element includes goals, policies, and actions that address erosion and siltation from the addition of impervious surfaces and alteration of existing drainage patterns. Proposed Resource Management Element Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Policy RM-6.4

directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Through implementation of the General Plan Update policies and existing regulations, erosion/siltation impacts from changes to the existing drainage patterns and increasing impervious surfaces would be less than significant.

Surface Runoff

The Planning Area is primarily developed, with limited areas of pervious surfaces. Although future development activities have the potential to slightly increase impervious areas within the Planning Area, the majority of development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with the proposed development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard.

The General Plan Update contains policies and actions to provide adequate stormwater infrastructure for flood control and to reduce run-off quantity. Proposed Resource Management Element Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Proposed Community Facilities Element Policy CF-4.1 encourages LACFCD to maintain sufficient levels

of storm drainage service and improve flood control facilities and channel segments. Policy CF-4.2 encourages stormwater to be directed towards permeable surfaces to allow for more percolation of stormwater into the ground. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4d ensures City review of development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Additionally, Lawndale Municipal Code Chapter 17.88, Water Efficient Landscape, establishes requirements and standards for water efficient landscapes in new and substantially altered or expanded existing development projects, including the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Through implementation of the General Plan Update Plan policies and actions and existing Federal, State, and local regulations discussed above, runoff would not exceed the capacity of drainage systems, provide substantial additional sources of polluted runoff, or cause flooding impacts from changes to the existing drainage patterns and increased impervious surfaces. Therefore, impacts would be less than significant.

Flood Flows

The Planning Area is highly urbanized and primarily developed with residential and non-residential uses. The Dominguez Channel is a channelized watercourse that runs through the eastern portion of the Planning Area. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. There are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard. The General Plan Update sets policies and actions for buildout of the City, but does not envision or authorize any specific development project. The General Plan Update contains policies and actions designed to reduce runoff flows and flood risk in the City. Proposed Public Safety Element Policy PS-5.1 coordinates with local, State, and Federal agencies so that the City's regulations related to flood control comply with Federal, State, and Local standards. Policy PS-5.3 requires development projects to adhere to the latest building, site, and design codes to avoid or minimize the

risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. Action PS-5a directs the City to monitor changes in Federal and State laws and regulations related to local flood protection, including the NFIP, and incorporates necessary changes into the Municipal Code and building codes as required. Action PS-5c directs the City to review County, State, and Federal flood control best practices and incorporates appropriate standards into the Municipal Code. The City has adopted the California Building Code, which contains flood resistant construction requirements. Future development projects would be required to adhere to applicable Federal, State, and local flood-related regulations. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and would be considered in the environmental review associated with the specific project being proposed. With implementation of General Plan Update goals, policies, and implementation and compliance with existing regulations, the General Plan Update would not impede or redirect flood flows; impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: Stormwater. Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution

Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-5.1: Flood Control Regulations. Coordinate with local, state, and Federal agencies so that the City's regulations related to flood control are in compliance with Federal, State, and Local standards.

Policy PS-5.3: Site Design. Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4: Best Management Practices. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.5: Changing Conditions. Coordinate with the Los Angeles County Flood Control and Waterworks Districts on changing flood conditions associated with climate change and extreme weather.

Policy PS-5.6: Local Storm Drainage Infrastructure. Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Action PS-5a: Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code and building codes as required.

Action PS-5b: Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.

Action PS-5c: Periodically review County, State, and Federal flood control best practices and incorporate appropriate standards into the Municipal Code.

COMMUNITY FACILITIES ELEMENT

Policy CF-4.1: Maintain Capacity. Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Policy CF-4.2: Stormwater Runoff. Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: Stormwater Treatments. Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: National Programs. Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

4. Flood Hazard, Tsunami, and Seiche Zones

Threshold: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Finding: Less than significant. (Draft EIR, Impact HWQ-4, pages 5.10-29 through 5.10-32)

Explanation: There are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard. Pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using BMPs during and after construction. Further, the General Plan Update includes policies and actions to reduce the risk of flooding and ensure compliance with regulatory requirements. Proposed Public Safety Element Policy PS-5.1 coordinates with local, State, and Federal agencies so that the City's regulations related to flood control comply with Federal, State, and Local standards. Policy PS-5.2 coordinates with FEMA so that Federal Insurance Rate Maps correctly depict flood hazards in the City. Policy PS-5.3 requires development projects to adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.5 coordinates with LACFCD on changing flood conditions associated with climate change and extreme weather. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. Action PS-5a directs the City to monitor changes in Federal and State laws and regulations related to local flood protection, including the NFIP, and incorporates necessary changes into the Municipal Code and building codes as required. Action PS-5c directs the City to review County, State, and Federal flood control best practices and incorporates appropriate standards into the Municipal Code. Proposed Resource Management Element Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment.

The Planning Area is approximately three miles inland of the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. There are no dams with the potential to inundate the Planning Area according to the Division of Safety of Dams Dam Breach Inundation Maps. There is a man-made lake in Alondra Park, within close proximity to the Planning Area; however, due to its size and the flat topography of the area, this lake would not generate a significant seiche risk to the Planning Area. As a result, tsunamis and seiches do not pose hazards to the Planning Area

With implementation of General Plan Update policies and actions, and implementation and compliance with existing regulations, impacts associated with the risk of pollutants from seiches and flooding that may

result from adoption and implementation of the General Plan Update would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: Stormwater. Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-5.1: Flood Control Regulations. Coordinate with local, state, and Federal agencies so that the City's regulations related to flood control are in compliance with Federal, State, and Local standards.

Policy PS-5.2: Flood Maps. Coordinate with Federal Emergency Management Agency (FEMA) so that Federal Insurance Rate Maps correctly depict flood hazards in the City.

Policy PS-5.3: Site Design. Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4: Best Management Practices. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.5: Changing Conditions. Coordinate with the Los Angeles County Flood Control and Waterworks Districts on changing flood conditions associated with climate change and extreme weather.

Policy PS-5.6: Local Storm Drainage Infrastructure. Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Action PS-5a: Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code and building codes as required.

Action PS-5b: Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.

Action PS-5c: Periodically review County, State, and Federal flood control best practices and incorporate appropriate standards into the Municipal Code.

5. Water Quality Control Plan and Groundwater Management Plan

Threshold: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Finding: Less than significant. (Draft EIR, Impact HWQ-5, pages 5.10-32 through 5.10-35)

Explanation: The local water quality control plan (Basin Plan) is maintained by the Los Angeles RWQCB. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan. The General Plan Update includes policies to implement NPDES requirements and enforcement of said regulations, such as: Action RM-6a, which ensures projects of one acre or more complete a SWPPP in compliance with State law and the City's MS4 permit; Action CF-4a, which implements the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA Group; and Action CF-4b, which works with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Through implementation of existing regulations and the General Plan Update policies and actions, implementation of the General Plan Update would not conflict or obstruct a water quality control plan. Therefore, impacts in this regard will be less than significant.

The Planning Area receives water from the GSWC Southwest System, which receives groundwater from the Central Basin and West Coast Basin. In compliance with the Central Judgment and West Coast Judgment, the Watermasters submit an annual report to the Los Angeles County Superior Court, which has jurisdiction to monitor ongoing management of the basins. The Central and West Coast Basins were designated as very low priority

basins. The SGMA exempts adjudicated groundwater basins from the requirements of designating a Groundwater Sustainability Agency and developing a Groundwater Sustainability Plan. The Central Judgment and West Coast Judgment provide for the legal and practical means of ensuring that the waters of each Basin are sustainably managed and put to maximum beneficial use. New development and redevelopment projects accommodated by the General Plan Update would be subject to the Central Basin Judgment West Coast Basin Judgment. Subsequent development projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Therefore, the General Plan Update would not conflict with implementation of a sustainable groundwater management plan.

The General Plan Update includes policies to support water conservation and responsible management of groundwater resources which is consistent with the tasks of the Watermaster. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6b calls for the City to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Under Action RM-6c, the City will work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy directs City coordination with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Thus, adoption and implementation of the General Plan Update will not conflict or obstruct a sustainable groundwater management plan and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: Conservation. Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: Stormwater. Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;

- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: Water Supply Needs. Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: Use of Recycled Water. Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: Climate Change Impacts. Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Policy CF-4.2: Stormwater Runoff. Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: Stormwater Treatments. Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: National Programs. Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez

Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

J. LAND USE AND PLANNING

1. Established Communities

Threshold: Would the project physically divide an established community?

Finding: Less than significant. (Draft EIR, Impact LU-1, pages 5.11-1 through 5.11-13)

Explanation: The proposed General Plan Update establishes the City's vision for future growth and development. Goal LU-1 of the General Plan Update aims to achieve "*A community with a fiscally sustainable mix of land uses that meets the diverse needs of Lawndale residents, offers a variety of housing, employment opportunities, and support the provision of public services.*" The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at infill locations primarily within

the Hawthorne Boulevard Specific Plan area, but would not create physical division within the community. The Project does not introduce new roadways or new or significantly expanded infrastructure that would divide an established community. The General Plan Update Land Use Element includes policies and actions to support cohesive development that would not physically divide an established community. Specifically, Policy LU-2.1 would encourage the preservation of the basic pattern of existing land uses, preserving residential neighborhoods, while providing for the enhancement of mixed-use corridors. Policy LU-3.1 considers as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area. Action LU-3c, through the development review process, evaluates development proposals for land use and transportation network compatibility with existing surrounding or abutting development or neighborhoods. The proposed General Plan would have a less than significant impact associated with the physical division of an established community.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-2.1: Existing Land Use Pattern. Strive to maintain the basic pattern of existing land uses, preserving residential neighborhoods, while providing for enhancement of mixed-use corridors to accommodate desirable redevelopment plans and improve economic sustainability.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Policy LU-4.3: Site Planning. Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways)

that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e: Implement the City's existing development standards, or where not in place, create new standards (either through an update to the Zoning Code or update to the Hawthorne Boulevard Specific Plan or other regulating tool) to regulate new construction and revisions to existing buildings. In particular, new development standards shall be created for higher density stand-alone residential projects and mixed-use projects to ensure that quality infill developments can be created within the areas identified for focused growth.

2. Conflicts With Plans

Threshold: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Finding: Less than significant. (Draft EIR, Impact LU-2, pages 5.11-13 through 5.11-24)

Explanation: The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. Discussion of the proposed General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, transportation, water quality, etc.) is provided in the relevant chapters of the Draft EIR. The State would continue to have authority over any State-owned lands in the vicinity of the City and the proposed General Plan Update would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects. The General Plan Update would be consistent with SCAG's regional planning efforts and a less than significant impact would occur in this regard. As set forth by State law, the General Plan serves as the primary planning document for the City and subordinate documents and plans would be updated to be consistent with the General Plan. Similar to the existing General Plan, the proposed General Plan Update focuses on a balanced land use pattern, creating a community where new development blends with existing neighborhoods, and promoting the City as a desirable place to live and work. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection, and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan Update would require modifications to the City's Zoning Code to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely alter portions of the Lawndale Municipal Code that were adopted to mitigate an environmental effect. Subsequent development and infrastructure projects

would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of future development projects. The policies listed below would ensure that the General Plan Update does not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.6: Uses to Meet Daily Needs. Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.2: Focused Areas for New Development. Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Policy LU-4.3: Site Planning. Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Policy LU-4.4: Pedestrian-Scale Amenities. Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

Policy LU-4.7: Landscaping. Encourage, to the maximum extent feasible, project and streetscape landscaping be designed to include drought tolerant, native California plant species and the use of a drip, micro-spray or other low-flow irrigation systems.

Action LU-4e: Continue to implement the City's existing development standards, or create new standards if appropriate, to regulate new construction and revisions to existing buildings. New standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill developments.

Action LU-4f: Seek grant funding ("greening" grants) to help offset the cost of landscape improvements along community corridors, with a focus on Hawthorne Boulevard.

MOBILITY ELEMENT

Policy M-1.7: Traffic Calming on Local Streets. Encourage traffic calming strategies, such as diverters, median islands, and speed humps, and incorporation of traffic calming design in residential and school areas to slow traffic and promote safety, while not reducing parking supply.

Action M-1e: Monitor cut-through traffic on local streets, especially along residential areas and schools, and where appropriate evaluate the applicability of traffic calming tools and implement improvements as necessary.

Policy M-2.2: Agency Coordination. Coordinate with neighboring cities, telecom companies, and regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.

Policy M-2.3: Facility Connections. Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to relate to those in neighboring jurisdictions.

Action M-2a: Participate in regional planning forums to ensure that the City's concerns are considered at the regional level.

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: Streetscape Improvements. Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: Safe Routes to School. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: Transit Use. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: Improve Local Public Transit Service. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: C (Green) Line Service. Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: C (Green) Line Stations. Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Policy M-5.6: Effects of New Technologies on Transit Use. Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

ActionM-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-7.1: Local Truck Routes. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Policy M-7.2: Roadway Design. Maintain roadway design standards to facilitate access to light industrial and manufacturing areas along designated truck routes.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

Policy M-9.2: Transportation Demand Management. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3: Regional Coordination. Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities

Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4: New Development. Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a: Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b: Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: Active Transportation Trails. Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: Service Area Radius. Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-2.4: Source Reduction and Recycling Efforts. Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: Organic Waste. Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste

disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Policy RM-4.1: Regional Cooperation. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: Measurement and Enforcement. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: GHG Emissions. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: GHG Reduction. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: Public Engagement. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade

these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NOx emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Policy RM-5.1: Compliance with State Legislation. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: Green Building Standards Code. Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: Renewable Energy. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through state programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

PUBLIC SAFETY ELEMENT

Policy PS-7.1: Community Preparedness. Promote a well-prepared City that can effectively overcome natural disasters and scarcity of resources due to climate change.

Policy PS-7.2: Collaboration. Collaborate with local, regional, State and/or Federal jurisdictions and agencies on climate resiliency and adaptation strategies.

Policy PS-7.3: Ecological Recovery. Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

Policy PS-7.4: Air Pollution. Work with responsible Federal, State, and County agencies to decrease air pollution emissions occurring within the air basin to reduce the risk posed by air pollution.

Policy PS-7.5: Energy Supply. Promote plans and programs that increase sustainable energy sources.

Policy PS-7.6: Drought Preparation. Implement necessary actions and programs to improve drought preparation and response for the most vulnerable community members.

Policy PS-7.7: Cooling Centers. Designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters; extend hours at air-conditioned sites during periods of extreme heat or power outage (if the site is supported by a backup generator).

Policy PS-7.8: Storms. Provide access to flood protection resources and services (signage, sandbags, etc.) as feasible at designated public facilities during and after extreme weather events.

Policy PS-7.9: Special Assistance. Address the needs of individuals with limited mobility or limited access to transportation for access to safe and comfortable shelter during extreme heat events or other severe weather events.

Policy PS-7.10: Leadership. Demonstrate leadership in local climate planning efforts through a range of tangible actions and policies at the municipal operations level.

Policy PS-7.11: Greenhouse Gas Reductions. Reduce communitywide greenhouse gas emissions locally by actively supporting regional efforts to reduce greenhouse gases throughout the county.

Policy PS-7.12: Extreme Heat Vulnerabilities. Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.

Policy PS-7.13: Ongoing Monitoring. Monitor climate change-related effects with local, regional, state, and/or Federal partners to provide information of effectiveness of existing infrastructure and programs.

Action PS-7a: Provide information and resources to the public and businesses regarding steps the City is taking to address the issue of climate change.

Action PS-7b: Expand the use of energy-efficient lighting, such as LEDs for City-owned light facilities.

Action PS-7c: Consider purchasing only electric or alternative-energy vehicles for the City vehicle fleet, as appropriate, based on the intended use of the vehicle.

Action PS-7d: Evaluate the feasibility for government-constructed and/or -operated new development to exceed the California Green Building Standards Code CalGreen Tier 1, or successor program, standards.

Action PS-7e: Promote the use of sustainable and carbon-neutral energy sources in new development.

Action PS-7f: Explore using renewable energy and clean generation technologies such as solar, wind, biogas, or fuel cells to power City facilities where appropriate.

K. MINERAL RESOURCES

1. Regional and Statewide Mineral Resources

Threshold: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Finding: Less than significant. (Draft EIR, Impact MR-1, page 5.12-3)

Explanation: The City has no known or identified mineral resources of regional or Statewide importance. The Planning Area is designated as MRZ-1 and MRZ-3. MRZ-1 classifies areas where adequate information indicates that no significant mineral deposits are present. MRZ-3 indicates that the significance of the mineral deposits is undetermined. The land within MRZ-3 is currently developed and is within a highly urbanized area. Given that this land has already been disturbed and developed, and that the Project does not propose any site-specific development, there is no potential for resource extraction from the MRZ-3 area. There are no known mineral deposits or resources in the Planning Area that are of significant value to the region or the State. Therefore, implementation of the proposed General Plan Update would have a less than significant impact on this environmental topic, and

no mitigation is required.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

2. Locally-Important Mineral Resource

Threshold: Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Finding: No impact. (Draft EIR, Impact MR-2, page 5.12-3 through 5.12-4)

Explanation: The Planning Area does not contain any "locally important mineral resource recovery sites." The Planning Area does not contain a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Implementation of the General Plan Update would not result in the loss of a designated mineral recovery site and as such, no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

L. NOISE

1. Ambient Noise Levels

Threshold: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Finding: Less than significant. (Draft EIR, Impact NOI-1, pages 5.13-20 through 5.13-29)

Explanation: *Transportation Noise Impacts*

Transportation noise includes noise from aircraft, railways, and roadways. The Planning Area is outside of any airport 65 dBA CNEL contours and therefore, there is no aircraft impact. One freight rail line runs through the City. The General Plan Update would not increase railway operations within the Planning Area; however, existing buildings are about 50 feet from the centerline of the railway and include primarily residential uses. Therefore, there is the potential for sensitive uses to be exposed to railway noise.

The primary noise source in the Planning Area by the year 2045 would continue to be vehicle traffic. By the year 2045, existing land uses adjacent

to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level. Compared to existing traffic noise levels, 2045 without Project traffic volumes are expected to be up to 0.8 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise along the analyzed roadways. Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore result in a less than significant impact to roadway noise levels.

Where future development projects under the General Plan Update may be exposed to noise levels that exceed the land use compatibility criteria, such as residential developments within the Hawthorne Boulevard Specific Plan area or sensitive land uses developed adjacent to the existing rail line, impacts could be mitigated to a level that is less than significant with the implementation of noise control measures, such as relocating residential outdoor recreational areas away from 60 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Additionally, the General Plan Update Public Safety Element includes policies and actions intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, proposed Policies PS-6.1 through PS-6.4 and proposed Action PS-6c would reduce potential noise impacts associated with transportation. Policy PS-6.1 requires adherence to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community. Policy PS-6.2 requires consistency with the land use compatibility standards contained in proposed Table PS-1 and the Lawndale Municipal Code. Policy PS-6.3 requires the use of best practices in new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code. Policy PS-6.4 requires acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses, and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in the proposed Public Safety Element. Action PS-6c requires new development and transportation projects be reviewed for compliance with the noise requirements established in the proposed General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code, and, where necessary, mitigate excessive noise through best practices. Following conformance with the existing regulatory framework, including the General Plan and Lawndale Municipal Code, impacts would be less than significant in this regard

Stationary Noise Sources

Implementation of the General Plan Update could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. While the General Plan Update does not explicitly propose any new noise-generating uses, the proposed Land Use Map would allow for the development of mixed-uses, increased residential development at higher densities, and new commercial development, which may result in new noise sources along major corridors, including Hawthorne Boulevard. Specific development projects and the details of future noise generating land uses that may be located in the City in the future are not known at this time. While no specific development projects are proposed under the General Plan Update, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses. Where this occurs, detailed noise studies would be required to ensure that noise control measures are implemented into the project design. Such measures could include the redesign of stationary noise sources away from sensitive uses, construction of sound walls or berms between noise generating uses and sensitive uses, using buildings to create additional buffer distance and screening, or other site design measures to ensure that non-transportation (stationary) noise sources do not cause exterior and interior noise levels to exceed allowable standards at sensitive receptors. The General Plan Update Public Safety Element includes policies and actions that are intended to reduce noise associated with stationary sources. Specifically, proposed Policies PS-6.3, PS-6.4, PS-6.8, and proposed Actions PS-6c, PS-6d, and PS-6e would reduce noise associated with stationary sources. Policy PS-6.3 requires the use of best practices in new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code. Policy PS-6.4 requires acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses, and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in the proposed Public Safety Element. Policy PS-6.8 requires the use of noise attenuation measures for all new commercial development expected to produce excessive noise. In existing cases where the City's noise standards are exceeded, Policy PS-6.8 directs Code Enforcement to require compliance. Action PS-6c requires new development and transportation projects be reviewed for compliance with the noise requirements established in the proposed General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code, and, where necessary, mitigate excessive noise through best practices. Action PS-6d requires acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in the proposed General Plan. The studies must include representative noise

measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with the proposed Public Safety Element. Action PS-6e requires review of locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process, and limits delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Exceptions may only be approved if full compliance with the nighttime limits of the noise regulations is achieved. Implementation of the proposed policies and actions of the General Plan Update would reduce noise impacts from stationary noise sources to a less than significant level

Construction Noise

Individual projects associated with implementation of the General Plan Update would result in short-term noise impacts associated with construction activities, both on- and off-site. Construction crew commute and the transport of construction equipment and materials to the site for future development projects would incrementally increase noise levels on access roads leading to the site. Truck traffic associated with project construction would be limited to within the permitted construction hours, as listed in the City's Municipal Code Section 8.20.070(A). Short-term construction-related impacts associated with worker commute and equipment transport on local streets leading to the project site would result in a less than significant impact on noise-sensitive receptors along the access routes. The site preparation phase of on-site construction activities, which includes grading and paving, tends to generate the highest noise levels since the noisiest construction equipment is earthmoving equipment. Site-specific construction activities associated with future development is expected to require the use of scrapers, bulldozers, motor graders, and water and pickup trucks. Potential impacts would be site-specific, depending on the equipment used and distances to sensitive receptors. The General Plan Update Public Safety Element includes policies and actions intended to reduce exposure to excessive noise, including construction noise. Policy PS-6.9 requires construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices. Action PS-6f requires all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible. With implementation of the General Plan Update policies and actions, and compliance with Section 8.20.070(A) of the Lawndale Municipal Code, impacts would be less than significant in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

General Plan Public Safety Element Table PS-1, *Land Use Compatibility for Community Noise Exposure*, presents a land use compatibility chart for community noise derived from a similar table originally prepared by the California Office of Noise Control (2017). This table is proposed to be included in the General Plan Update Public Safety Element. The table identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" exterior noise levels for various land uses. A "conditionally acceptable" designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements.

PUBLIC SAFETY ELEMENT

Policy PS-6.1: California Building Code. Adhere to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community.

Policy PS-6.2: Noise Exposure. Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Table PS-1 and the Lawndale Municipal Code to facilitate acceptable noise exposure levels for existing and future development.

Policy PS-6.3: Noise Mitigation. Require new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

Policy PS-6.4: Acoustical Studies. Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element. For projects that are required to prepare an acoustical study, the following mobile and stationary noise source criteria shall be used to determine the significance of those impacts.

A. Mobile Noise Sources:

- Where existing traffic noise levels are within or below the "normally acceptable" noise criteria at the affected land use (see Table PS-1), a readily perceptible 5 dBA CNEL or greater increase in roadway noise will be considered significant;

- Where existing traffic noise levels falls within the "conditionally acceptable" noise criteria at the sensitive land use, a +3 dBA CNEL or greater increase in roadway noise levels will be considered significant; and
- Where existing traffic noise levels exceed the "conditionally acceptable" noise criteria at the sensitive land use, a + 1.5 dBA CNEL or greater increase in roadway noise levels will be considered significant

B. Stationary and Non-Transportation Noise Sources

- A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

Policy PS-6.8: Commercial Noise. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

Policy PS-6.9: Construction Noise. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices.

Action PS-6c: Review new development and transportation projects for compliance with the noise requirements established in this General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code. Where necessary, require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials such as rubberized asphalt.

Action PS-6d: Require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in this General Plan. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with this element.

Action PS-6e: Review the locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process. Limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved.

Action PS-6f: Require all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible.

2. Groundborne Vibration and Groundborne Noise Levels

Threshold: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Finding: Less than significant. (Draft EIR, Impact NOI-2, pages 5.13-29 through 5.13-32)

Explanation: The main sources of vibration in the Planning Area are related to vehicles, railways and construction. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. Although not specifically within Lawndale, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface.

One freight rail line runs through the City of Lawndale. Existing buildings are about 50 feet from the centerline of the railway and include primarily residential uses. The General Plan Update would not increase railway operations within the Planning Area. Additionally, the Project does not include any specific development proposals. The General Plan Update includes proposed Action PS-6h, which would require future residential projects located adjacent to railroad lines to follow Federal Transit Administration vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day). With implementation of proposed Action PS-6h, this impact would be reduced to less than significant.

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary sources of vibration during construction are usually vibratory rollers and large bulldozers. Construction activities in the Planning Area have the potential to result in significant impacts related to groundborne vibration associated with construction activities. This impact would be reduced to less than significant with the implementation of the General Plan Update Public Safety Element Policy PS-6.14 and Action PS-6k, which require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Policy PS-6.14: Vibration Studies. Require vibration impact studies for new discretionary development and transportation improvements whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

Action PS-6h: Require new residential projects located adjacent to railroad lines to follow the FTA vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day).

Action PS-6k: Require vibration impact studies for all new discretionary projects, including those related to development and transportation, whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The studies shall include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation's Construction Vibration Guidance Manual.

3. Airport Noise

Threshold: For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise?

Finding: No Impact. (Draft EIR, Impact NOI-3, page 5.13-32)

Explanation: Hawthorne Municipal Airport, also known as Jack Northrop Field, is an FAA-designated general aviation reliever airport owned by the City of Hawthorne. The airport is located approximately 1.4-miles northeast of the northeastern-most portion of the Planning Area. The City of Hawthorne General Plan Noise Element provides noise contours (Figures 5A and 5B) for Hawthorne, which include the airport. The noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne. The Planning Area is not located within any adopted airport land use plan and is located outside of any airport 65 dBA CNEL contours. As such, there are no impacts related to private airports, public airports, airstrips, or adopted airport land use plans.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: There are no relevant proposed General Plan Update goals, policies, and actions.

M. POPULATION AND HOUSING

1. Population Growth

Threshold: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure?

Finding: Less than significant. (Draft EIR, Impact POP-1, pages 5.14-8 through 5.14-11)

Explanation: The City and surrounding area, are highly urbanized and considered to be built-out. While there is the potential for infrastructure improvements within the Planning Area associated with site-specific development and overall development growth, General Plan implementation would not require the extension of roads or other infrastructure into an area that is not already served. At buildout, the General Plan Update would accommodate approximately 3,942 new housing units and 808,864 square feet of new non-residential building square footage within the Planning Area compared to existing conditions. This new growth may increase the City's population by approximately 9,482 residents and 2,738 jobs compared to the existing condition. Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire State, is inevitable. The primary factors that account for population growth are natural increase and net migration. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. Residential growth within the City would continue to occur based primarily on the demand of the housing market.

Potential growth inducing impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. SCAG is the responsible agency for developing and adopted regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. SCAG projects that the City's population will reach 34,400 persons by 2045. The General Plan Update is projected to result in a population of approximately 47,948 persons by 2045. The City's projected population would be approximately 39.4 percent greater than SCAG's forecast. Similarly, the City's projected housing stock and employment would be approximately 38.4 percent and 10.9 percent greater than SCAG forecasts, respectively. The General Plan Update growth projections would exceed SCAG's 2045 population, housing stock, and employment projections for the City of Lawndale. General Plan Update growth projections form the basis of SCAG's planning and policy documents, including regional growth forecasts. Thus, the growth anticipated with the General Plan Update would be considered in SCAG's updated growth forecasts for the City. In addition, the proposed

Project is intended to implement the City's 2021-2029 Housing Element; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs would be included as part of SCAG's future growth forecasts.

The proposed General Plan Update includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. Further, the General Plan Update accounts for the proposed Project's anticipated population growth and establishes goals, policies, and actions to accommodate such growth. The proposed Land Use Element Goal LU-2 seeks to manage and direct growth so that the community and its neighborhoods are protected and enhanced. With implementation of General Plan Update policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds beyond those disclosed and analyzed throughout the Draft EIR. Therefore, population and housing growth associated with the proposed General Plan Update would result a less than significant impact, as there are no additional potential environmental impacts beyond those analyzed and disclosed in the Draft EIR that would result from growth accommodated by the proposed project.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Goal LU-2: Managed Growth. A City that manages and directs growth to strategic locations so that the community and its neighborhoods are protected and enhanced.

Policy LU-2.2: Focused Areas for New Development. Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

2. Displacement of Housing

Threshold: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Finding: Less than significant. (Draft EIR, Impact POP-2, pages 5.14-10 through 5.14-11)

Explanation: The General Plan Update will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. Overall, the proposed Project would provide new development opportunities to support the vision for development consistent with the General Plan Update and the State's Housing Element Law, including accommodating the City's 2021-2029 RHNA.

The Project does not propose any site-specific development at this time; therefore, no existing residents would be displaced. The General Plan Update establishes goals, policies, and actions to ensure the compatibility of new and existing development, including housing. The proposed Land Use Element Goal LU-2 seeks to manage and direct growth so that the community and its neighborhoods are protected and enhanced. Goal LU-3 supports new development to be sensitively integrated with existing development. Policy LU-3.1 ensures the City considers the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area. Therefore, impacts of the proposed General Plan Update on the displacement of people or housing are considered less than significant and no mitigation is required. The policies listed below would further ensure that a range of housing types are provided

in the City, and that housing conditions are evaluated as the housing supply ages.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Goal LU-2: Managed Growth. A City that manages and directs growth to strategic locations so that the community and its neighborhoods are protected and enhanced.

Policy LU-2.2: Focused Areas for New Development. Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-2.3: Hawthorne Boulevard Specific Plan. Facilitate the redevelopment of Hawthorne Boulevard through implementation of the Hawthorne Boulevard Specific Plan which encourages a mixture of quality multi-family housing development, local- and destination-type commercial uses, eateries, and civic uses such as cultural and performing art facilities in innovative development formats.

Action LU-2e: Implement the Hawthorne Boulevard Specific Plan to guide future development in this area. This includes reviewing and revising the implementation strategies identified in the Specific Plan as part of the Specific Plan's comprehensive update, and prioritizing the most critical actions for funding and staff resources.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.3: **Code Compliance**. Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.4: Residential Uses. Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including transportation facilities.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Action LU-3e: Analyze land use compatibility through the development review process to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.

N. PUBLIC SERVICES

1. Fire Protection

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection and Emergency Services?

Finding: Less than significant. (Draft EIR, Impact PS-1, pages 5.15-9 through 5.15-13)

Explanation: Development accommodated under the General Plan Update would result in additional residents and businesses in the City. 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,864 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area. According to LACoFD, there are no plans to expand Station 21 and/or develop a new fire station for Lawndale. Future development projected in the General Plan Update may result in the need for additional LACoFD resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether LACoFD would need to expand or construct new facilities to meet the demand of future development in the Planning Area. Future development is assumed to occur over time through 2045; thus, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the City. The General Plan Update includes a range of policies and actions to ensure that fire protection and emergency services are provided in a timely fashion, are adequately funded, are coordinated between the City and the LACoFD, and that new development funds its fair share of services. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in

conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Public Safety Element Policy PS-1.5 supports policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1e directs the investigation and pursuit of available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 directs the collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a promotes the coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. LACoFD would continue to regularly monitor fire department resources to ensure that adequate facilities, staffing, and equipment are available to serve existing and future development and population increases. Further, as development occurs, a proportional increase in property tax, charges for LACoFD services, and other funding sources would increase and offset impacts of new development on LACoFD's existing resources in the City.

Future site-specific development would be required to comply with applicable City, County, and State code and ordinance requirements for fire protection. The Lawndale Municipal Code Chapter 15.20, *Fire Code*, adopts and incorporates the California Fire Code, as amended by Title 32 the Los Angeles County Fire Code, by reference. As part of the development review process, site-specific development proposals would be required to comply with standard LACoFD conditions of approval. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate.

The environmental effect of providing the fire protection and emergency services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan Update. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of fire protection and emergency services are less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

PUBLIC SAFETY ELEMENT

Policy PS-1.5: Resources. Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Policy PS-4.1: Fire Protection Services. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4: Building Fire Codes. Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9:Cost Sharing. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

2. Police Protection

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Law Enforcement Services?

Finding: Less than significant. (Draft EIR, Impact PS-2, pages 5.15-13 through 5.15-16)

Explanation: Development accommodated under the General Plan Update would result in additional residents and businesses in the City, which would increase demand for police protection services provided by the Los Angeles County Sheriff's Department (LASD). Additional facilities, personnel, and equipment may be required to maintain adequate levels of police protection within the City. Development assumed by the General Plan Update is expected to occur gradually over time through 2045; thus, any increase in demand for police protection services would similarly occur gradually as additional development and associated population growth is added to the Planning Area, which also depends on the economic market demands. As individual projects are proposed within the Planning Area, LASD service levels and staffing requirements would be evaluated on an annual basis to determine if additional staffing and/or facilities would be required. If the General Plan Update is adopted, LASD would utilize the projected growth in population, dwelling units, and nonresidential development to effectively plan for increases in population and police protection service demand. The

General Plan Update includes a range of policies and actions, to ensure that adequate police protection services are provided to serve growth associated with implementation of the General Plan Update. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Public Safety Element Policy PS-1.5 supports policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1e directs the investigation and pursuit of available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs the coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

The environmental effect of providing police protection services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. If new police facilities are needed to serve growth associated with future development anticipated by the General Plan Update, the facilities would most likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. Any future development under the

General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of police protection services are less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

PUBLIC SAFETY ELEMENT

Policy PS-1.5: Resources. Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: Cost Sharing. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

3. Schools

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools?

Finding: Less than significant. (Draft EIR, Impact PS-3, pages 5.15-16 through 5.15-20)

Explanation: Implementation of the General Plan Update could result in the development of up to 3,942 housing units over existing conditions. Assuming all new development anticipated under the proposed General Plan Update occurs within the LESD and CVUHSD's school boundary, the Project would generate approximately 2,760 students (1,971 elementary/middle school students and 789 high school students). As mentioned above, the CVUHSD presumes that school facilities have a useful life span of 20 years before modernization is needed in order to maintain the same level of service as previously existed; therefore, the costs of modernized/expanded school facilities are based on anticipated 20-year growth generated by new development within the CVUHSD district area.

The exact location of future development and associated student generation is currently unknown. However, future development projected within the General Plan Update is anticipated to occur gradually through 2045 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually as additional development occurs in the Planning Area. The General Plan Update includes policies and actions, to ensure that adequate services are provided to serve growth associated with implementation of the General Plan Update. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to

participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. Policy PF-6.1 encourages the maintenance of high-quality schools and diverse educational opportunities in Lawndale. Policy PF-6.3 directs the City to work with developers and the school districts to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population. Action PF-6a directs the City to work with school districts to ensure adequate school facilities are provided and maintained in the community. This includes consultation with school districts during the processing of development proposals and requiring the mitigation of impacts to schools in compliance with State law.

School districts assess development impact fees against residential and non-residential development to mitigate impacts resulting from the increase in demand for school related services. Individual development projects in accordance with the General Plan Update would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

The environmental effect of providing school services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development of new or expanded school facilities. If the school districts serving the City determine that new school facilities are needed to serve growth associated with future development anticipated by the General Plan Update, the schools would most likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and development of school facilities would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of schools are less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: Cost Sharing. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy PF-6.1: Education and Learning. Continue to encourage the maintenance of high-quality schools and diverse educational opportunities in Lawndale.

Policy PF-6.2: Lifelong Learning. Proactively cooperate with the Lawndale Elementary School District and Centinela Valley Union High School District to encourage the provision of lifelong learning opportunities for persons living and working in Lawndale.

Policy PF-6.3: School Facilities. Work with developers and the school districts to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population.

Action PF-6a: Continue to work with the school districts to ensure adequate school facilities are provided and maintained in the community. Specifically, the City should:

- During the processing of residential and non-residential development proposals, ensure the school districts are consulted regarding the potential impact of the project on educational services and facilities. When proposed developments cannot be served by existing facilities and services, the City shall work with the developer and the school district in exploring options for service provision and facility funding.
- Prior to approving a project that is likely to generate students, require the applicant to mitigate school impacts to the full extent permitted by State law through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.
- Cooperate with school districts to update population projections, student generation formulas, potential school sites, and facilities improvement plans.

4. Libraries

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Library Facilities?

Finding: Less than significant. (Draft EIR, Impact PS-4, pages 5.15-20 through 5.15-23)

Explanation: Development accommodated under the General Plan Update would result in additional residents and businesses in the City, which would potentially increase the demand for public services, including library services. The Lawndale Library is a part of, and is operated by, the LA County Library system. Future development anticipated by the General Plan Update may result in the need for additional LA County Library resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether LA County Library would need to expand or construct new facilities to meet the demand of future development in the Planning Area. The General Plan Update includes policies and actions to ensure that library services are adequately funded, are coordinated between the City and the LA County Library, and that new development funds its fair share of services. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local

and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. Policy PF-6.6 directs the City to work with the LA County Library system to provide library facilities and services necessary to meet the needs of all segments of the community. Action PF-6b directs the City to work with the LA County Library system to ensure that library development keeps pace with overall City development and population growth.

The environmental effect of providing library services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of library services are less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: Cost Sharing. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy PF-6.6: Libraries. Work closely with the Los Angeles County Library system to provide library facilities and services necessary to meet the needs of all segments of the community.

Action PF-6b: Continue to work with the Los Angeles County Library system to ensure that library development keeps pace with overall City development and population growth.

O. PARKS AND RECREATION

1. Increased Use of Parks/Recreation Facilities

Threshold: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Finding: Less than significant. (Draft EIR, Impact PR-1, pages 5.16-4 through 5.16-8)

Explanation: 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, resulting in an additional population of 9,482 people within the Planning Area. These new residents are expected to use park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. The additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown.

The City does not currently have an adopted standard of parkland acreage to residents. However, the General Plan Update does include the adoption of a parkland standard of 3.0 acres of parkland per 1,000 residents. The provision of new parks and recreation facilities would help to reduce the potential for adverse impacts and physical deterioration of existing parks and recreation facilities, by providing additional facilities to accommodate the demand for parks and recreation facilities. These new facilities would be provided at a pace and in locations appropriate to serve new development.

Development under the General Plan Update could indirectly lead to the construction of new parks and recreation facilities to serve new growth and

to meet existing parks and recreation needs. The General Plan Update supports the creation of new parks and recreation facilities to accommodate a wide range of activities for all age groups. Proposed Resource Management Element Policy RM-1.1 strives to provide residents with a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities. Policy RM-1.2 strives to achieve a minimum parkland standard of three acres per 1,000 City residents. Policy RM-1.4 directs the City to actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs. Policy RM-1.5 directs City collaboration with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public. Policy RM-1.8 recognizes the value of non-traditional public and semi-public open space and encourages creativity and innovation during the development and provision of additional open space or parks to supplement the City's green space and parks. Action RM-1a directs the City to periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development. Action RM-1b directs the City to pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance. Action RM-1c directs the creation of a Master Parks Plan to guide the provision and maintenance of parkland in the City. Action RM-1d works with the Lawndale Elementary School District to maximize the joint use of facilities and pursues additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

The General Plan Update does not specifically propose any development projects, including parks. As a result, site-specific physical impacts of future park development and construction cannot be determined until projects are brought forward for review. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

In addition to ensuring that new and expanded parks and recreation facilities are provided to accommodate new growth, the General Plan Update includes policies and actions to ensure that parks and recreation facilities are adequately maintained and improved to serve both existing and planned growth. Proposed Land Use Element Policy LU-1.5 requires the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to regularly review and adjust

population assumptions and forecasts in order to adequately plan for growth. Proposed Community Facilities Element Policy CF-1.1 maintains and finances the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy CF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Action CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Although implementation of the General Plan Update would cause an incremental increase in demand for parks in the future, this increase could be reduced to a less than significant level by the provision of public parkland and private on-site recreational amenities and through the payment of park fees, as established in Municipal Code Chapter 12.34. Compliance with and the implementation of applicable General Plan Update policies and actions and compliance with the City Municipal Code would ensure parks and recreational facilities would not be overused to the point of substantial deterioration.

The General Plan Update does not propose or approve the construction or expansion of parks or recreational facilities. Any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts to parks and recreational facilities associated with implementation of the General Plan Update would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: Recreation Types. Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.2: Parkland Standard. Achieve a minimum parkland standard of 3 acres per 1,000 City residents.

Policy RM-1.4: Parkland Funding. Actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs.

Policy RM-1.5: Partnerships and Joint-Use Agreements. Collaborate with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public.

Policy RM-1.8: Creative Open Space and Parks. Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1a: Periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1d: Continue to work with the Lawndale Elementary School District to maximize the joint use of facilities and pursue additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

2. Construction and Expansion of Parks/Recreation Facilities

Threshold: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?

Finding: Less than significant. (Draft EIR, Impact PR-2, pages 5.16-8 through 5.16-11)

Explanation: No site-specific projects are proposed under the General Plan Update. 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units and an additional population of 9,482 people. Based on the General Plan Update's proposed standard of three acres per 1,000 residents, the increase in population due to implementation of the Project would require approximately 96.1 acres of additional parkland, for a total of 122.3 acres of parkland. Construction of these future parks could result in environmental impacts. At the time future parks are proposed, they would require a separate environmental review and compliance with regulations in existence at that time, which would address potential environmental impacts related to the construction and operation of new parks. Furthermore, these future parks would be subject to General Plan Update policies and actions intended to protect the environment and the programmatic mitigation framework established in the Draft EIR. Proposed Land Use Element Policy LU-1.5 requires the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to regularly review and adjust population assumptions and forecasts in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Resource Management Element Policy RM-1.1 strives to provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities. Policy RM-1.4 directs the City to actively pursue financing for parkland acquisition and maintenance, and allocates sufficient funding to park development to support the community's recreational needs. Policy RM-1.5 directs City collaboration with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public. Action RM-1a directs the City to periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development. Action RM-1b directs the City to pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance. Action RM-1c directs the creation of a Master Parks Plan to guide the provision and maintenance of parkland in the City. Action RM-1d works with the Lawndale Elementary School District to maximize the joint use of facilities and pursues additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs. Proposed Community Facilities Element Policy CF-1.1 maintains and finances the capital improvement program to ensure the timely

implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy CF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Action CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Therefore, upon compliance with environmental regulations established at the time future park and recreational projects are proposed, and adherence to General Plan Update policies and actions, the environmental impacts associated with the construction or expansion of recreational facilities would less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.5: Public Services for Quality of Life. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: Recreation Types. Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.4: Parkland Funding. Actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs.

Policy RM-1.5: Partnerships and Joint-Use Agreements. Collaborate with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public.

Action RM-1a: Periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1d: Continue to work with the Lawndale Elementary School District to maximize the joint use of facilities and pursue additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

P. TRANSPORTATION

1. Circulation System Conflicts

Threshold: Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Finding: Less than significant. (Draft EIR, Impact TR-1, pages 5.17-19 through 5.17-24)

Explanation: *Circulation System*

No specific development projects are proposed as part of the Lawndale General Plan Update, but the update will accommodate future growth in the City. The General Plan Update Mobility Element does not propose any roadway changes or increases in roadway capacity. The Mobility Element developed as part of the General Plan Update contain goals, policies, and actions that support access to and the performance of the circulation system. Specifically, proposed Mobility Element Goal M-1 promotes a safe circulation system for the Planning Area. Policy M-1.5 ensures that new developments in the City provide appropriate and feasible improvements to improve traffic flow and roadway operations. Policy M-1.7 encourages the development of traffic calming strategies to slow traffic and promote safety. Action M-1b directs the City to continue to update and implement projects in the City's Capital Improvement Plan to maintain the roadway network. As a result, implementation of the General Plan Update would not conflict with applicable plans, polices, or ordinances related to vehicle circulation, and its impact on the City's circulation system is considered less than significant.

Bicycle and Pedestrian Circulation

The proposed Mobility Element references and incorporates the South Bay Bicycle Master Plan and the SBCCOG Local Travel Network, which include bicycling and walking improvements, and facilities that will improve non-motorized accessibility and connectivity throughout the City. The proposed Mobility Element includes new planned bike facilities on several key roadways. Implementation of the General Plan Update would also enhance the pedestrian experience by providing a more walkable and denser environment, especially in the HBSP area. The Mobility Element developed as part of the General Plan Update contains goals, policies, and actions that support access to and the performance of bicycle and pedestrian facilities. Specifically, Mobility Element Policy M-3.1 requires the City to

apply Complete Street principals, which are streets that are designed to provide safe travels for all modes of travel, to all transportation improvement projects. Policy M-6.4 directs the City to identify and eliminate gaps in sidewalks and bikeways to create a more complete active transportation network. Policy M-6.5 requires new developments in the City to provide bicycle and pedestrian facilities. Action M-6b directs the City to implement the South Bay Bicycle Master Plan during roadways projects as funding allows. The implementation of policies and actions contained in the General Plan Update would ensure that the Project would not conflict with a program plan, ordinance, or policy addressing bicycle facilities. Therefore, the Project's impact is considered less than significant.

Public Transit System

The City does not have defined measures of effectiveness for public transit service and circulation. The proposed General Plan Update would be expected to increase demand for travel via public transit given the proposed development and expected increase in residents and employees. This population and job growth within the City could increase the demand for public transit but also result in increased levels of vehicular traffic which could slow transit operations and impact transit reliability. The Mobility Element developed as part of the General Plan Update includes policies to support and enhance transit service. Specifically, Mobility Element Policy M-5.2 encourages the City to coordinate with local public transit provides to plan and improve local transit service and transit facilities. Policy M-5.3 requires that new developments construct transit facilities when appropriate. The implementation of policies and actions contained in the General Plan Update would ensure that the Project would not conflict with a program plan, ordinance, or policy addressing the public transit system. Therefore, the Project's impact is considered less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-4.4: Pedestrian-Scale Amenities. Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

MOBILITY ELEMENT

Goal M-1: Local Circulation System. A community served by a safe circulation system with adequate traffic flow on arterial roadways and minimized adverse traffic effects on residential neighborhoods.

Policy M-1.5: Development-Related Traffic Impacts. Impose conditions on new development to provide appropriate and feasible improvements to enhance and/or prevent the impediment to traffic flow, parking, ADA accessibility and roadway operations.

Policy M-1.7: Traffic Calming on Local Streets. Encourage traffic calming strategies, such as diverters, median islands, and speed humps, and incorporation of traffic calming design in residential and school areas to slow traffic and promote safety, while not reducing parking supply.

Action M-1a: Periodically review and assess the vehicular level of service along City facilities to determine, what, if any, improvements are warranted to maintain a safe and efficient flow of traffic throughout the City of Lawndale. Based on a thorough review of facility operations and funding availability, improvements should be included in the City's Capital Improvement Plan and/or required as part of project approval through the development review process.

Action M-1b: Continue to update and implement projects in the City's Capital Improvement Plan to maintain and repair roadways; construct and improve roadways to build out the roadway network to ensure adequate levels of service.

Action M-1e: Monitor cut-through traffic on local streets, especially along residential areas and schools, and where appropriate evaluate the applicability of traffic calming tools and implement improvements as necessary.

Policy M-2.3: Facility Connections. Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to relate to those in neighboring jurisdictions.

Goal M-3: Complete Streets. A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: Streetscape Improvements. Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: Safe Routes to School. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: Transit Use. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: Improve Local Public Transit Service. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: C (Green) Line Service. Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: C (Green) Line Stations. Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Policy M-5.6: Effects of New Technologies on Transit Use. Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

ActionM-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Goal M-6: Active Transportation. A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: Active Transportation Trails. Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: Service Area Radius. Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure

the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

ECONOMIC DEVELOPMENT ELEMENT

Policy ED-4.2: Streetscape Improvements. Enhance aesthetics and "curb appeal" of the Hawthorne corridor with strategic investments such as landscaping, outdoor lighting, wayfinding, entry and building façade improvements, and other initiatives that increase its attractiveness for businesses and consumers.

Policy ED-4.3: Accessibility. Enhance City and regional connectivity by supporting multimodal transportation options along Hawthorne Boulevard and other major City thoroughfares.

Action ED-4c: Implement strategies and actions in the Mobility Element and the Hawthorne Specific Boulevard Plan that promote infrastructure improvements and land use policies that will enhance economic activity and accessibility.

2. CEQA Guidelines Section 15064.3(b)

Threshold: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Finding: Less than significant. (Draft EIR, Impact TR-2, pages 5.17-24 through 5.17-29)

Explanation: Future conditions with the Project would result in decreased VMT per employee and VMT per capita in comparison to existing conditions. The

2045 Project VMT per capita is approximately 28 percent less than the existing Los Angeles countywide average VMT per capita and the 2045 Project VMT per employee is approximately 18 percent less than the existing Los Angeles countywide average VMT per employee. Thus, the proposed General Plan Update would not exceed 15 percent below the existing Los Angeles countywide average VMT per capita or VMT per employee and therefore would result in a less than significant Project VMT impact. The Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG's 2020 RTP/SCS goals. Therefore, the Project's cumulative impacts related to VMT would be less than significant.

The Land Use and Mobility elements developed as part of the General Plan Update includes policies to support the reduction of VMT, including increasing the balanced mix of residential and employment opportunities within the City with the proposed land uses. Overall, implementation of the Project would result in reductions in VMT per capita and VMT per employee compared to 2023 existing conditions; impact thresholds would not be exceeded. Therefore, with respect to consistency with CEQA Guidelines Section 15064.3, subdivision (b), the impact of the Project would be less than significant and no mitigation would be required.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-2.2: Focused Areas for New Development. Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-4.4: Pedestrian-Scale Amenities. Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

MOBILITY ELEMENT

Goal M-3: Complete Streets. A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: Streetscape Improvements. Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: Safe Routes to School. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: Transit Use. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: Improve Local Public Transit Service. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: C (Green) Line Service. Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: C (Green) Line Stations. Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active

transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Action M-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Goal M-6: Active Transportation. A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.1: Vehicle Miles Traveled Guidelines. Require vehicle miles traveled (VMT) analysis for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain Level of Service (LOS) standards for the purposes of planning and designing street improvements.

Policy M-9.2: Transportation Demand Management. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3: Regional Coordination. Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4: New Development. Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a: Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b: Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: Active Transportation Trails. Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: Service Area Radius. Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

3. Design Features

Threshold: Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: Less than significant. (Draft EIR, Impact TR-3, pages 5.17-25 through 5.29-31)

Explanation: The Project does not propose changes to the Citywide roadway network and configuration. The City's design and construction standards and specifications provide for coordinated and standardized development of city facilities, including roadways. As individual projects would undergo review by the City for approval and construction and would have to meet design guidelines, potential safety design hazards associated with land development projects would be addressed and result in less than significant impacts. Prior to implementation, any improvements would be subject to a detailed review and future consideration by the City's Public Works engineering staff and other relevant City departments. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be needed at the project design level. Roadway improvements would have to be made in accordance with the City's roadway design guidelines and meet design guidelines in the California Manual of Uniform Traffic Control Devices and the Caltrans Roadway Design Manual.

The types of uses included as part of the General Plan Update are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Planning Area and in the surrounding area. In addition, the Mobility Element developed as part of the General Plan Update contains policies in support of roadway network safety and reducing design hazards. This includes proposed Mobility Element Policy M-3.5 and Action M-3e which promotes managing and improving the City's transportation network to be safe, accessible and consistent with ADA and to include ADA accessible features as part of roadway infrastructure projects. Proposed Mobility Element M-3.4 encourages roadway design to include traffic calming measures to maintain safe vehicular speeds. Proposed Land Use Element Policy LU-3.1 considers the compatibility of

new development with surrounding uses when reviewing development proposals. The implementation of goals, policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would not substantially increase hazards due to geometric design features or incompatible uses. Therefore, the impact of the Project with respect to design and incompatible use hazards would be considered less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Goal LU-3: Land Use Compatibility. A community where new development is sensitively integrated with existing development, including residential neighborhoods, and minimizes impacts on surrounding land uses.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.4: Residential Uses. Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including transportation facilities.

Action LU-3b: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods

MOBILITY ELEMENT

Goal M-3: Complete Streets. A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.4: Traffic Calming on Residential Streets. Encourage traffic calming strategies and incorporation of traffic calming design in residential areas to slow traffic and promote safety.

Policy M-3.5: ADA Accessibility. Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

Policy M-3.6: Safe Routes to School. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Action M-3e: Include ADA-accessible facilities as part of roadway infrastructure projects

4. Emergency Access

Threshold: Would the project result in inadequate emergency access?

Finding: Less than significant. (Draft EIR, Impact 5.17-31, page 5.17-33)

Explanation: The Project does not propose site-specific development; emergency accessibility is typically assessed at the project level. Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, Temporary Storage of Construction Materials, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion of such construction. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review the proposed development for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access

would be provided to and within the site. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the Fire Department would ensure that construction and operation of future projects associated with implementation of the General Plan Update would not result in inadequate emergency access. In addition, the Public Safety and Mobility Elements developed as part of the General Plan Update contains policies in support of emergency access along local roads.

The proposed Mobility Element Goal M-3 promotes striving to maintain sufficient access and mobility for all modes of travel and users of the roadway network. The proposed Public Safety Element Policy PS-1.6 encourages improvements to emergency access and circulation throughout the community. Policy PS-4.3 requires all new developments to provide adequate access for emergency vehicles and evacuation as part of the development review process. The implementation of goals, policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would not result in inadequate emergency access. Therefore, the impact of the General Plan Update with respect to emergency access would be considered less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

MOBILITY ELEMENT

Policy M-2.1: Freeway Interchanges. Coordinate with Caltrans to develop appropriate configurations and operations at Interstate 405 interchange intersections to minimize congestion on City streets and create safe conditions.

Policy M-2.2: Agency Coordination: Coordinate with neighboring cities, telecom companies, and regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.

Goal M-3: Complete Streets. A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users.

Policy M-3.5: ADA Accessibility. Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

Action M-3e: Include ADA-accessible facilities as part of roadway infrastructure projects.

PUBLIC SAFETY ELEMENT

Policy PS-1.6: Emergency Access. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-4.3: Emergency Access. Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

Q. TRIBAL CULTURAL RESOURCES

1. Tribal Cultural Resources

Threshold: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Finding: Less than significant. (Draft EIR, Impacts TCR-1, pages 5.18-8 through 5.18-10)

Explanation: No archeological or tribal cultural resources have been identified within the City. The Cultural Resources Assessment concludes the lack of identified resources is likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites. The Planning Area is located within the traditional territory of the Gabrielino or Tongva Indians. At the time of publication of the Draft EIR, no Tribal Organizations have requested formal consultation with the City with regards to the Project. Grading of original in situ soils could expose buried tribal cultural resources and features including sacred sites. While the General Plan Update does not directly propose site-specific development with the potential to directly impact a tribal cultural resource, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of previously undiscovered tribal cultural resources.

The General Plan Update Resource Management Element includes policies and actions addressing tribal cultural resources. Proposed Policy RM-3.1 requires the protection of areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.5 requires consultation with Native American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Action RM-3a requires the City to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3e requires, for all development proposals within areas with the potential to contain prehistoric/historic resources, a study to be conducted by a professional archaeologist to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery. Action RM-3g requires, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, that the City halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains is permitted until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

Potential impacts to tribal cultural resources associated with future development would be reduced through implementation of General Plan Update policies and actions. Subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Subsequent discretionary projects implemented in accordance with

the General Plan Update would be subject to the provisions of AB 52 and may require tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded that could be impacted by subsequent projects. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: Documentation. Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.5: Tribal Consultation. In accordance with State, local, and Tribal intergovernmental consultation requirements, consult with Native American tribes that may be impacted by proposed development and land use policy changes, as necessary.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3e: For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Action RM-3g: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human

remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

R. UTILITIES AND SERVICE SYSTEMS

1. Utilities and Service Systems

Threshold: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Finding: Less than significant. (Draft EIR, Impact USS-1, pages 5.19-26 through 5.19-35)

Explanation: *Water*

In regard to water facilities, the General Plan Update is expected to result in population and employment growth within the Planning Area, and thus, an overall increase in demand on water supply, which would necessitate construction of future water supply infrastructure. Buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,864 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area. This increased demand for water infrastructure would be located within areas that are already developed and serviced by the GSWC. Since no specific development projects are proposed as part of the General Plan Update, the environmental effects from constructing or expanding facilities are unknown at this time. All water infrastructure construction activities associated with future development would be subject to compliance with existing local, State, and Federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. The City would continue to coordinate with GSWC to ensure adequate water distribution facilities are available to serve future development. Lawndale Municipal Code Section 3.14.090 imposes a tax on water users in the City and would help fund necessary infrastructure improvements. Furthermore, these future water facilities would be subject to General Plan Update policies and actions intended to ensure the provision of water and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Resource Management Element Policy RM-6.1 promotes residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices. Action RM-6c directs the City to work with local water agencies and service providers to: implement

groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-2.1 coordinates with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded water facilities to a level that is less than significant.

Wastewater

In regard to wastewater, the General Plan Update is expected to result in increased population and employment growth within the Planning Area, and thus, an overall increase in demand on the existing sewer system associated with increased sewage flows. Buildout under the General Plan Update could yield a net change over existing conditions of an additional population of 9,482 people within the Planning Area. Using the wastewater generation rate of 83 gpcd from LACSD's 2012 Clearwater Program Master Facilities Plan, growth associated with implementation of the General Plan Update would generate 3.9 MGD of wastewater within the Planning Area, a net increase of 0.8 MGD (25.8 percent) over existing conditions. According to LACSD's Clearwater Program Master Facilities Plan, it is estimated that 12.1 miles of City-used Joint Outfall trunk sewers would need to be hydraulically relieved by 2050. No set timeline has been established for when those lines would be improved. The LACSD continues to monitor and adjust its projected flows and would expand conveyance infrastructure and

treatment capacity as needed based on these updates. As the regional sewage conveyance agency, LACSD would take the lead in conducting any additional analyses and development of any necessary improvement plans. At such time, LACSD would utilize SCAG's population projection data as part of its projections, such that any change in the City's land use plans or population projections would ultimately be incorporated into any future analysis depending on the timing of such data updates.

The General Plan Update does not include specific development proposals; therefore, the environmental effects of future wastewater collection systems are unknown at this time. At the time future projects are proposed, they would be required to ensure sufficient local and trunk sewer capacity exists to serve the specific development. Pursuant to Lawndale Municipal Code Section 13.08.070, a building permit would not be issued if the anticipated sewage from a proposed project is found by the City Engineer to exceed the capacity available in the public sewer. Lawndale Municipal Code Chapter 13.08 provides for sewer connection and facilities expansion fees for the City's local wastewater transmission lines. Additionally, LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand LACSD's wastewater services. The General Plan Update includes policies and actions to ensure adequate wastewater services and facilities are available, and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-3.1 directs the City to work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development. Policy CF-3.2 directs coordination with the CSMD to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained. Policy CF-3.3 proposes the City take a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy CF-3a directs the City to require that sufficient wastewater infrastructure capacity is available to serve proposed

development prior to approval of the project; ensure the project applicant has paid the required fees prior to occupancy of any new development; and to periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded wastewater facilities to a level that is less than significant.

Stormwater

The Planning Area is primarily developed, with limited areas of pervious surfaces. Although future development activities have the potential to slightly increase impervious areas within the Planning Area, the majority of development activities under the proposed General Plan Update would consist of infill and redevelopment on currently urbanized sites. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this is a less than significant impact and no additional mitigation is required.

The General Plan Update policies and actions would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan Update, and would ensure that future drainage and flood control infrastructure projects do not result in adverse environmental impacts. Proposed Resource Management Element Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Proposed Community

Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action CF-4d reviews development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded stormwater facilities to a level that is less than significant.

Electrical, Natural Gas, and Telecommunications

In regard to electrical, natural gas, and telecommunication services, the Planning Area is within the service areas of SCE, SoCalGas, and various telecommunication providers. The Planning Area is generally developed and existing electrical, natural gas, and telecommunications infrastructure exists within the Planning Area. New growth anticipated by the General Plan Update would require increased electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future implementing projects under the General Plan Update would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Furthermore, these future facilities would be subject to General Plan Update policies and actions intended to ensure adequate provision of services and facilities and that potential environmental impacts associated with the implementation of new or expanded electrical, natural gas, and

telecommunications infrastructure would be reduced. Proposed Resource Management Element Policy RM-5.4 promotes the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure. Action RM-5a implements energy conservation measures in public buildings. Action RM-5b encourages innovative building design, layout, and orientation techniques to minimize energy use. Action RM-5c directs the City to review development projects to ensure compliance with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-5.1 directs the City to work cooperatively with utility providers to promote the provision of adequate telecommunications services and facilities to serve the needs of existing and future residents and businesses. Action CF-5a directs the City to confer with telecommunications providers regarding major development plans and participate in the planning of the extension of utilities. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded electrical, natural gas, and telecommunications facilities to a level that is less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

RESOURCE MANAGEMENT ELEMENT

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Policy RM-6.1: Conservation. Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: Stormwater. Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: Fair Share. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: Revenue Sources. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy CF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy CF-1.9: Cost Sharing. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy CF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy CF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action CF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action CF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy CF-2.1: Water Supply Needs. Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: Use of Recycled Water. Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: Climate Change Impacts. Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Policy CF-3.1: Wastewater System. Work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy CF-3.2: Adequate Infrastructure. Coordinate with the County of Los Angeles Consolidated Sewer Maintenance District to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained.

Policy CF-3.3: Integrated Systems Planning. Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

Action CF-3a: Through the development review process, continue to cooperate with the County of Los Angeles Consolidated Sewer Maintenance District to ensure adequate wastewater facilities are provided and maintained in the community. Specifically, the City should:

- Require that sufficient wastewater infrastructure capacity is available to serve the development prior to approval of the project;
- Ensure the project applicant has paid the required fees prior to occupancy of any new development; and
- Periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities.

Policy CF-4.1: Maintain Capacity. Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Policy CF-5.1: Cooperation with Utilities Providers. Work cooperatively with utility providers to promote the provision of adequate telecommunications services and facilities to serve the needs of existing and future residents and businesses.

Action CF-5a: Confer with telecommunications providers regarding major development plans and participate in the planning of the extension of utilities.

2. Water Supplies

Threshold: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Finding: Less than significant. (Draft EIR, Impact USS-2, pages 3.19-35 through 5.19-38)

Explanation: The General Plan Update is expected to result in increased population and employment growth within the Planning Area, and a corresponding increase in the demand for additional water supplies. Buildout under the General Plan Update could yield a total of 15,405 housing units, a population of 47,430 people, 5,351,026 square feet of non-residential building square footage, and 9,208 jobs within the Planning Area. This represents development growth over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,864 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area. Water service in the Planning Area is provided by the GSWC. GSWC's 2020 UWMP indicates that GSWC can meet projected water demands under normal-, single dry-, and multiple dry-year conditions through 2045. However, the General Plan Update is expected to result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies, which have not been accounted for in the UWMP. The General Plan Update would result in a water demand of approximately 8.0 AFY within the Planning Area, which would be a net increase of 1.6 AFY (25 percent) over existing conditions. Future updates to the UWMP will account for future residential growth associated with the City's 2021-2029 RHNA and the additional residential and non-residential growth opportunities provided by Project implementation, and would identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.

As site-specific development is not currently proposed, there is the potential that for future qualifying projects, a Water Supply Assessment would be required pursuant to SB 610. A Written Verification of Supply per SB 221 is prepared as a condition of approval for a subdivision map of 500 units or more. Depending on the project, one or both of these analyses may be required. Development proposals that may not warrant a Water Supply Assessment and/or Written Verification of Supply, but meet the definition of a project under CEQA, would still require an analysis of sufficient water supplies in the CEQA process. The Lawndale Municipal Code includes several provisions related to water conservation, including: Chapter 8.40, which allows the City Council to declare voluntary and mandatory water restrictions, as appropriate to water supply conditions; Chapter 15.28, which adopts CALGreen's regulations to improve water efficiency and

conservation; and Chapter 17.88, which promotes water-efficient landscaping in new and substantially altered or expanded existing development projects. Additionally, the General Plan Update includes goals, policies, and actions directed towards water conservation to ensure that adequate water supply, treatment, and distribution capacity is available to meet the needs of future development without negatively impacting the existing community. These actions would result in reduced water consumption on a per capita basis that would help offset the increased demand from additional development within the Planning Area. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6b ensures City participation in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Action RM-6c directs the City to work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-2.1 coordinates with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Action CF-2c directs the City to cooperate with the State, regional, and local water agencies and suppliers to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Through implementation of existing Federal, State, and local regulations and the General Plan Update goals, policies, and actions, the environmental impacts to water supplies would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: Conservation. Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: Landscaping. Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: Water Supply Needs. Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: Use of Recycled Water. Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: Climate Change Impacts. Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

3. Wastewater Capacity

Threshold: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Finding: Less than significant. (Draft EIR, Impact USS-3, pages 5.19-38 through 5.19-41)

Explanation: The City's local sewers discharge into the LACSD facilities and are conveyed for treatment at LACSD's JWPCP. The JWPCP has a capacity of 400 MGD and treats approximately 260 MGD of wastewater, resulting in a remaining capacity of 140 MGD. LACSD projects an average flow of 423 MGD at the JWPCP for 2050, which exceeds the plant's current permitted capacity by 23 MGD. The LACSD continues to monitor and adjust its projected flows and would expand treatment capacity as needed based on these updates. No current plant expansion is being planned, as ongoing water conservation efforts throughout the region continue to lower current wastewater flows. Buildout under the General Plan Update could yield a net change over existing conditions of an additional population of 9,482 people within the Planning Area. Using the wastewater generation rate of 83 gpcd from LACSD's 2012 Clearwater Program Master Facilities Plan, growth associated with implementation of the General Plan Update would generate 3.9 MGD of wastewater within the Planning Area, a net increase of 0.8 MGD (25.8 percent) over existing conditions.

The General Plan Update enables additional development but does not include specific development proposals. At the time future projects are proposed, they would require a separate environmental review and compliance with regulations in existence at that time to ensure adequate wastewater treatment capacity exists. LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand LACSD's wastewater services. Additionally, the General Plan Update includes goals, policies, and actions to ensure adequate wastewater facilities capacity to serve the Project's projected demand. Proposed Land Use Element Policy LU-2.6 would notify adjacent

jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-3.1 directs the City to work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development. Policy CF-3.2 directs coordination with the CSMD to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained. Policy CF-3.3 proposes the City take a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy CF-3a directs the City to require that sufficient wastewater infrastructure capacity is available to serve proposed development prior to approval of the project; ensure the project applicant has paid the required fees prior to occupancy of any new development; and to periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities. The implementation of existing Federal, State, and local regulations and the General Plan Update policies and actions would ensure adequate wastewater treatment capacity and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: Regional Growth. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: Infrastructure and Public Services. A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: Capital Improvements. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.3: Public Facility Plans. Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.5: Infrastructure Rehabilitation. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy CF-1.8: Regional Issues. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy CF-1.10: Regional Services Providers. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy CF-1.11: Capital Improvement Planning. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action CF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action CF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy CF-3.1: Wastewater System. Work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy CF-3.2: Adequate Infrastructure. Coordinate with the County of Los Angeles Consolidated Sewer Maintenance District to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained.

Policy CF-3.3: Integrated Systems Planning. Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

Action CF-3a: Through the development review process, continue to cooperate with the County of Los Angeles Consolidated Sewer Maintenance District to ensure adequate wastewater facilities are provided and maintained in the community. Specifically, the City should:

- Require that sufficient wastewater infrastructure capacity is available to serve the development prior to approval of the project;
- Ensure the project applicant has paid the required fees prior to occupancy of any new development; and
- Periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities.

4. Solid Waste Generation

Threshold: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Finding: Less than significant. (Draft EIR, Impact USS-4, page 5.19-41 through 5.19-43)

Explanation: Future development of projects as contemplated under the General Plan Update may increase the population within the Planning Area by an additional 9,482 people. The City has achieved a disposal rate of 2.1 PPD per resident in 2021. Assuming these disposal rates remain constant throughout the life of the General Plan Update, the new growth under General Plan buildout would result in a net increase of approximately 19,912.2 PPD of solid waste over existing conditions, which equals 9.6 net TPD or 3,634.0 net tons of solid waste per year. The City's projected increase in solid waste generation associated with 2045 buildout under the General Plan Update is within the permitted capacity of the Olinda Alpha Landfill, Sunshine Canyon Landfill, and El Sobrante Landfill, where the vast majority of waste from the City was disposed of in 2019. Conservatively assuming the Olinda Alpha Landfill and Sunshine Canyon Landfill reach full capacity during the 20-year planning horizon of the General Plan Update, the El Sobrante Landfill would have adequate

capacity to accommodate the City's projected solid waste generation under buildout of 49.8 TPD. Further, it is more likely that future solid waste would be distributed to the other landfills serving the City.

All future development would be required to comply with the mandatory commercial and multifamily recycling requirements of AB 341, thus reducing the amount of landfill waste. Furthermore, the General Plan Update includes policies and actions to responsibly manage and reduce solid waste. Proposed Resource Management Element Policy RM-2.1 ensures compliance with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting. Policy RM-2.2 supports efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services in the City, and periodically reviews waste collection performance to verified adequacy of service. Policy RM-2.3 directs City participation in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and to ensure adequate landfill capacity in the region. Policy RM-2.5 directs the City to work with appropriate service providers to collect and compost green waste to distribute for use in parks, medians, and other municipal areas. Policy RM-2.6 directs the City to work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery. Policy RM-2.7 promotes Citywide educational programs related to recycling. Action RM-2a ensures solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan. Action RM-2c requires standard language is included in request for services and in City agreements requiring contractors to use BMPs to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates. Action RM-2e encourages recycling, reuse, and appropriate disposal of hazardous materials through increased participation in single-family and multi-family residential curbside recycling programs; increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and reduced yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques. Through the implementation of existing regulations and the General Plan Update policies and actions, this is a less than significant impact

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.1: Compliance with State Legislation. Comply with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting.

Policy RM-2.2: Solid Waste Collection. Support efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services for present and future residents and businesses, and periodically review waste collection performance to verified adequacy of service.

Policy RM-2.4: Source Reduction and Recycling Efforts. Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: Organic Waste. Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Policy RM-2.6: Fees and Funding. Work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery.

Policy RM-2.7: Public Education. Promote Citywide educational programs to inform residents of the benefits of recycling and appropriate recycling options and locations.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Action RM-2c: Include standard language in request for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates.

Action RM-2e: Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increased participation in single-family and multi-family residential curbside recycling programs;
- Increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and
- Reduce yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

5. Solid Waste Regulations

Threshold: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Finding: Less than significant. (Draft EIR, Impact USS-5, pages 5.19-43 through 5.19-45)

Explanation: Chapter 8.32 of the Lawndale Municipal Code establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. The City has also established disposal and mandatory recycling requirements for commercial facilities, single family residential, and multifamily residential premises to comply with State law diversion requirements. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Republic Services) to handle the City's solid waste and requires Republic to cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Republic and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by AB 939.

The General Plan Update includes policies and actions to responsibly manage and reduce solid waste in compliance with Federal, State, and local regulations. Proposed Resource Management Element Policy RM-2.1 ensures compliance with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting. Policy RM-2.2 supports efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services in the City, and periodically reviews waste collection performance to verified adequacy of service. Policy RM-2.3 directs City participation in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and to ensure adequate landfill capacity in the region. Policy RM-2.5 directs the City to work with appropriate service providers to collect and compost green waste to distribute for use in parks, medians, and other municipal areas. Policy RM-2.6 directs the City to work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery. Policy RM-2.7 promotes Citywide educational programs related to recycling. Action RM-2a ensures solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan. Action RM-2c requires standard language is included in request for services and in City agreements requiring contractors to use BMPs to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates. Action RM-2e encourages recycling, reuse, and appropriate disposal of hazardous materials through increased participation in single-family and multi-family residential curbside recycling programs; increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and reduced yard and

landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques. Through the implementation of existing regulations and the General Plan Update policies and actions, future development implemented by the General Plan Update would continue to comply with management and reduction statutes and regulations related to solid waste and impacts would be less than significant.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.1: Compliance with State Legislation. Comply with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting.

Policy RM-2.2: Solid Waste Collection. Support efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services for present and future residents and businesses, and periodically review waste collection performance to verified adequacy of service.

Policy RM-2.4: Source Reduction and Recycling Efforts. Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: Organic Waste. Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Policy RM-2.6: Fees and Funding. Work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery.

Policy RM-2.7: Public Education. Promote Citywide educational programs to inform residents of the benefits of recycling and appropriate recycling options and locations.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Action RM-2c: Include standard language in request for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates.

Action RM-2e: Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increased participation in single-family and multi-family residential curbside recycling programs;
- Increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and
- Reduce yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

S. WILDFIRE

1. Response Plans

Threshold: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Finding: No impact. (Draft EIR, Impact WF-1, pages 5.20-10 through 5.20-12)

Explanation: The Planning Area is not located within an State Responsibility Area (SRA) or within a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA). Therefore, although the General Plan Update would allow for a variety of new development within the Planning Area, no future development within the Planning Area would be located within a FHSZ in SRA or LRA. Any future development would be required to comply with all City and LACoFD requirements for fire prevention and safety measures, including site access. Additionally, implementation of the General Plan Update would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. While the Project does not propose site-specific development, infrastructure improvements would occur gradually to accommodate the new growth. Future development would be designed, constructed, and maintained in accordance with applicable standards, including vehicular access to ensure that adequate emergency access and evacuation would be maintained. Pursuant to Municipal Code Chapter 15.20, construction activities that may temporarily restrict fire apparatus access would be required to implement appropriate measures to facilitate the passage of fire apparatus and emergency vehicles through/around any effected roadways, as part of the building permit process. The General Plan Update identifies major arterials as the primary routes for evacuation; however, evacuation routes would depend upon the emergency event and area affected. Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There

is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion of such construction. Thus, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan

The General Plan Update includes policies and actions to address public safety and emergency evacuation. Proposed Public Safety Element Goal PS-1, and subsequent policies and actions, pertains to emergency operations. Policy PS-1.3 implements emergency preparedness and response measures in coordination with the County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.4 requires the Lawndale Local Hazard Mitigation Plan to be regularly maintained and updated. Policy PS-1.6 seeks opportunities to improve emergency access and circulation throughout the community. Action PS-1a reviews County and State emergency response procedures that must be coordinated with City procedures. Action PS-1b continues to implement and update (when relevant) the City's EOP. Policy PS-4.2 continues involvement of the LACoFD in the development review process to ensure fire safety is addressed in new and modified developments. Policy PS-4.3 ensures all new development provides adequate access for emergency vehicles and evacuation. With adherence to Municipal Code regulations and General Plan Update policies, implementation of the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-1: Emergency Operations. A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.2: Critical Facilities. Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: Emergency Preparedness and Response. Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: Local Hazard Mitigation. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.6: Emergency Access. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Action PS-1a: Regularly review County and State emergency response procedures that must be coordinated with City procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.3: Emergency Access. Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

2. Pollutant Concentrations

Threshold: Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Finding: No impact. (Draft EIR, Impact WF-2, pages 5.20-12 through 5.20-13)

Explanation: The Planning Area does not contain lands classified as FHSZs, nor is the Planning Area located within an SRA. The Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development, which typically does not facilitate the spread of wildfire in the same manner as vegetated, open space areas. The Project would allow for a variety of new development within the Planning Area, but does not propose any site-specific development. Implementation of the General Plan Update would not substantially alter the slope, prevailing winds, or other factors that would increase exposure Lawndale residents, employees or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. Future development is not anticipated to exacerbate wildfire risks. The General Plan Update includes policies and actions to address public safety and emergency services, including fire protection services. Proposed Public Safety Element Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Action PS-4a

requires all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City. Therefore, with implementation of the applicable General Plan Update goals, policies and actions, and compliance with fire codes, no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Policy PS-1.4: Local Hazard Mitigation. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.6: Emergency Access. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Goal PS-4: Fire Hazards. A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: Fire Protection Services. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4: **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Action PS-4b: Work with LACoFD to disseminate educational programs for residents on fire hazard risks and fire safety measures.

3. Infrastructure Risks

Threshold: Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Finding: No impact. (Draft EIR, Impact WF-3, pages 5.20-13 through 5.20-15)

Explanation: The City is highly urbanized and existing infrastructure generally exists within the Planning Area. While no site-specific development is currently proposed, future development anticipated by the General Plan Update could require the eventual construction and installation of new infrastructure or

maintenance of existing infrastructure, including roads, water and sewer, and power lines to serve increased growth and development. The Planning Area does not contain lands classified as FHSZs, nor is the Planning Area located within an SRA.

The General Plan Update includes provisions for emergency access, fire protection services, and fire safe design site standards. Proposed Public Safety Element Policy PS-1.2 directs coordination with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Future development of utility infrastructure would be subject to the requirements established in Public Resources Code Section 4292, which requires clearing of flammable fuels for a minimum 10-foot radius from the outer circumference of poles and towers; and Section 4293, which sets basic requirements for clearances around electrical conductors. Furthermore, future development would be required to meet vegetation clearance requirements outlined in Title 14, Section 1104.1(d) of the California Code of Regulations for single overhead facilities.

Maintenance of existing infrastructure and the potential installation of new infrastructure for future projects in the Planning Area would be required to comply with Fire Code requirements found in the Municipal Code (Chapter 15.20). Proposed development would be reviewed by the LACoFD to determine the specific fire requirements applicable to ensure compliance with the Fire Code. The potential for future projects to impact environmental resources to meet compliance with fire development standards such (as fuel breaks and clearance requirements) would require site specific environmental evaluation under CEQA to identify any site-specific impacts. In addition, any development in the City would need to comply with the California Building Code, Public Resource Code, and the City Municipal Code to ensure that new developments have access to necessary utilities, and any additional utility construction complies with all code requirements. Implementation of the General Plan Update policies and actions, combined with local and State requirements, would ensure that

potential wildland fire hazards would not be exacerbated by the installation or maintenance of local infrastructure, and no impact would occur.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Policy PS-1.2: Critical Facilities. Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.4: Local Hazard Mitigation. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: Resources. Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Goal 4: Fire Hazards. A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: Fire Protection Services. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4: Building Fire Codes. Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

4. Runoff Risks

Threshold: Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Finding: No impact. (Draft EIR, Impact WF-4, pages 5.20-15 through 5.20-17)

Explanation: The General Plan Update would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. There are no designated FHSZs within the Planning Area. Additionally, the Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development.

There are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard. Future development resulting from implementation of the General Plan

Update could increase the potential for localized flooding in low spots or where infrastructure is unable to accommodate peak flows during a storm event. However, all future development and redevelopment projects would be required to comply with applicable Federal, State, regional, and local plans, policies, and regulations to address site-specific drainage and potential flooding risks. Specifically, future site-specific development would be required to comply with Municipal Code Chapter 13.12 and 13.16. Municipal Code Chapter 13.12 establishes required BMPs during operational phase of projects. Municipal Code Chapter 13.12 also indicates that each person applying to the City for a grading or building permit must submit satisfactory proof to the City that a SWPPP has been prepared, before the City issues any grading or building permit on the construction project. Municipal Code Chapter 13.16 requires subject new development and redevelopment projects to comply with SUSMP conditions assigned by the City, consisting of LID structural and non-structural BMPs; source control BMPs; and structural and non-structural BMPs for specific types of uses. Section 13.16.060 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 13.16.070 requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Per Section 13.16.110, applicants for new subject development and redevelopment projects must agree to maintain any structural or treatment control BMPs. These regulations would minimize danger to life and property due to the hazards of flood, soil erosion, seepage and destruction of natural topography and plant material. Further, subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and would be considered in the environmental review associated with the specific project being proposed.

The General Plan Update includes policies and actions to address public safety, which would limit risks to people and structures within the City. Proposed Public Safety Element Policy PS-1.2 directs coordination with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Policy PS-5.3 adheres to the latest building,

site, and design codes to avoid or minimize the risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Compliance with local, State, and Federal regulations, and General Plan Update goals, policies, and actions would reduce potential exposure of people or structures to significant risks resulting from runoff, post-fire slope instability, or drainage changes. No impact would occur in this regard.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

PUBLIC SAFETY ELEMENT

Goal PS-1: Emergency Operations. A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.2: Critical Facilities. Coordinate with service providers to ensure the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Goal 4: Fire Hazards. A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: Fire Protection Services. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: Development Review. Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Goal PS-5: Flood Hazards. A community that is protected from flood hazards.

Policy PS-5.3: Site Design. Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4: Best Management Practices. Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.6: Local Storm Drainage Infrastructure. Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

SECTION III
IMPACTS THAT ARE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

There are no impacts that require mitigation above and beyond implementation of the policies and actions included in the General Plan.

SECTION IV
IMPACTS THAN CANNOT BE FULLY MITIGATED TO A LESS THAN SIGNIFICANT LEVEL

The City Council hereby finds that, despite the incorporation of General Plan goals, policies, and actions identified in the EIR and in these Findings, the following environmental impacts cannot be fully mitigated to a less than significant level and a Statement of Overriding Considerations is therefore included herein:

A. AIR QUALITY

1. Cumulatively Considerable Pollutant Emissions

Threshold: Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard?

Finding: Significant and Unavoidable. (Draft EIR, Impact AQ-2, pages 5.3-36 through 5.3-39)

Explanation: The SCAQMD has established numerical significance thresholds for regional emissions during construction and operation. Daily emissions were estimated for the construction of the land uses provided in the General Plan Update. The calculations used to develop construction emissions incorporate compliance with applicable dust control measures required to be implemented during each phase of construction by SCAQMD Rule 403 (Control of Fugitive Dust), and fugitive VOC control measures required to be implemented by architectural coating emission factors based on SCAQMD Rule 1113 (Architectural Coatings); however, the construction-related daily emissions would exceed the SCAQMD significance thresholds for volatile organic compounds (VOCs), NO_X, CO, PM_{10}, and $PM_{2.5}$. Therefore, short-term regional construction emissions would be potentially significant. Additionally, operation of future development accommodated by the General Plan Update would generate criteria air pollutant emissions from project-generated vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. Operational emissions for future development accommodated by the General Plan Update would exceed regulatory thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$. While these thresholds are the only thresholds available for

numerically determining significance, it should be noted that these thresholds were specifically developed for use in determining significance for individual projects and not for program-level documents, such as the General Plan Update. However, as emissions for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ exceed regulatory thresholds, the regional operational emissions would be potentially significant.

The proposed policies and actions of the General Plan Update would potentially reduce emissions, which could potentially address impacts related to exceeding air quality regulatory thresholds. These policies and actions are oriented toward the reduction of the air quality impacts of individual projects. Action RM-4k requires that future development projects implemented under the General Plan Update would be required to demonstrate consistency with SCAQMD construction threshold emissions. With respect to operational emissions, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the General Plan Update's policies and actions. Policy RM-4.2 of the General Plan Update Resources Management Element requires the City to coordinate with CARB and SCAQMD to enforce the standards of the Clean Air Act. Policy RM-4.6 encourages and incentivizes higher density and mixed-use development opportunities to lessen the impacts of traffic congestion on local air quality. Policy RM-4.8 requires the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts. Action RM-5c provides for the continue review of development projects to ensure that all new public and private development complies with Title 24 energy standards, as well as the energy efficiency standards established by the General Plan Update and the Municipal Code. However, as there is no way to determine the effectiveness of such regulations, policies, and actions for individual projects, it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. While implementation of these policies and actions would reduce criteria pollutant emissions resulting from implementation of the General Plan Update, the extent to which the impacts are reduced would need to be determined on a project-by-project basis, as necessary. Therefore, this impact is significant and unavoidable.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple

transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.4: Commercial Corridors. Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

Policy LU-1.6: Uses to Meet Daily Needs. Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

MOBILITY ELEMENT

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Action M-3a When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Action M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.3: Hawthorne Boulevard Sidewalks. Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.
Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.2: Transportation Demand Management. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Action M-9b Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: Air Quality and Greenhouse Gas Emissions. Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: Regional Cooperation. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: Measurement and Enforcement. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: GHG Emissions. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: Sensitive Receptors. Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: GHG Reduction. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: Mitigation. Public Engagement. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual

projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet EPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NO_X emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: Energy Resources. A community that safely manages its energy resources.

Policy RM-5.1: Compliance with State Legislation. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: Green Building Standards Code. Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: Renewable Energy. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: Energy Needs. Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: Business Community. Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: Public Education. Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: Promote Energy Conservation in Existing Building Stock. Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

2. Sensitive Receptors

Threshold: Would the project expose sensitive receptors to substantial pollutant concentrations?

Finding: Significant and Unavoidable. (Draft EIR, Impact AQ-3, pages 3.3-39 through 3.3-42)

Explanation: Criteria air pollutant emissions have the potential to result in health impacts on sensitive receptors located near new development within the Planning Area. Based on the nature and extent of new development, nearby sensitive receptors could be exposed to levels of toxic air contaminants that could result in a potential increase in cancer, acute, and/or chronic risk. Because the exact nature, location, and operation of the future developments are unknown, and because health risk impacts from TACs are cumulative over the life of the nearby receptors, quantification of potential health risks would be speculative. However, as construction and operation of these future developments would occur within close proximity to sensitive receptors, there is the potential for risk to exceed regulatory levels. Additionally, without knowing the exact specifications for all projects that may be developed under the General Plan Update, there is no way to accurately calculate the potential for health impacts from the overall General Plan Update. Individual projects would be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. Because there is no way to determine the potential for these projects to affect health of sensitive receptors within the City of Lawndale, the proposed Project would result in potentially significant health impacts. The proposed policies of the General Plan Update would potentially reduce emissions, which could potentially reduce impacts related to exceeding regulatory thresholds of criteria air

pollutant emissions. Goal RM-4 of the General Plan Update Resources Management Element addresses potential air quality impacts by improving air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions. Specifically, Policy RM-4.7 addresses potential air quality impacts to sensitive receptors. Policy LU-1.1 of the General Plan Update Land Use Element promotes a land use pattern that would reduce pollution and air quality impacts. With respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the General Plan Update policies and actions would mitigate and reduce such emissions. However, the exact location, type, nature, and size of future projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time, as the details of potential future projects are not currently known. As such, there is no way to determine the extent to which these regulations will be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. Therefore, localized operational impacts, construction and operational health, and toxic air impacts would remain significant and unavoidable.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS: Refer to the General Plan Update goals, policies and actions cited above.

B. GREENHOUSE GAS EMISSIONS

1. Generation of Greenhouse Gas Emissions

Threshold: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Finding: Significant and Unavoidable. (Draft EIR, Impact GHG-1, pages 5.8-20 through 5.8-38)

Explanation: Implementation of the proposed Project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage. Potential future development associated with implementation of the

General Plan Update would generate GHGs during the construction and operational phases of the Project. Project construction-related activities would generate a maximum of approximately 36,584 $MTCO_2e$ of GHG emissions in a single year. Total GHG emissions construction-related activities would be approximately 677,483, over the entire course of construction (assumed to start in year 2023 and end in year 2045). Project operational GHG emissions would total approximately 203,504 $MTCO_2e$ annually. The Lawndale General Plan Update includes goals, policies, and actions to reduce GHG emissions, as provided below. The proposed Project would provide for more residential, commercial, and mixed-use development in proximity to each other, as well as in proximity to transit. Further, Project implementation would provide for a denser urban environment with improved amenities that support active (non-motorized) transportation opportunities within the Planning Area. Accordingly, the Project is consistent with plans and policies designed to achieve the State's GHG reduction goals. However, it cannot be guaranteed that construction and operational emissions would result in a less than significant impact with regards to GHG impacts.

Proposed General Plan Update Resources Management Element Action RM-4a would require the City to implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts, as well as to develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions, and work with the SBCCOG and/or other local, regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures. While the reduction of GHG emissions puts the City on the path to achieve its long-term emissions targets, since the CAP was developed in 2017, prior to AB 1279, the City would need additional actions to keep the City on a path that aligns with the State of California's longer-term goal for 2045. The CARB 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045. The Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping. However, although the Project would not conflict with the 2022 Scoping Plan, this is not sufficient to ensure that individual development projects associated with the proposed Project would be consistent with the net zero greenhouse gas emissions target encapsulated by AB 1279. Therefore, since full consistency between the proposed Project and AB 1279 cannot be ensured at this programmatic level of analysis, implementation of the proposed Project could result in a significant impact on the environment due to the release of GHGs.

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS), adopted by SCAG in 2020, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. SCAG's 2020 RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15. The Project would be consistent with the 2020 RTP/SCS through various polices. The General Plan Update's goals, policies, and actions would support development that is encouraged by the 2020 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State's long-term climate policies. By furthering implementation of SB 375, the General Plan Update supports regional land use and transportation GHG reductions consistent with State regulatory requirements. Therefore, the Project would be consistent with the GHG reduction-related actions and strategies contained in the 2020 RTP/SCS. Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

In order to further reduce GHG emissions associated with buildout of the General Plan Update, the City has included numerous goals, policies and actions in the General Plan Update aimed at reducing GHG emissions and promoting sustainability in the Planning Area. The General Plan Update proposes goals, policies and actions that are specifically relevant to climate change and GHG emissions and energy consumption within the Planning Area. Specifically, the General Plan Update Resources Management Element includes Policy RM-4.1, which supports regional efforts, including those organized through the SCAQMD, SCAG, the SBCCOG, and CARB to implement the regional AQMP. Policy RM-4.3 aligns the City's local GHG reduction targets with the statewide GHG reduction targets of AB 32, and aligns the City's GHG reduction goal with the Statewide GHG reduction goal of Executive Order S-03-05. Policy RM-4.9 requires the City to consider and adopt new local policies and programs that would help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan. Additionally, Action RM-4a requires the City to Implement the local GHG reduction measures identified in the City of Lawndale CAP, participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts, develop a Climate Action Team to support and guide the City's efforts to conserve energy and

reduce emissions, and work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Furthermore, numerous policies and programs in the General Plan Update address sustainable development, which influence operational mobile, energy, and area-source emissions in the Planning Area. For example, the proposed Resource Management Element Policy RM-4.6 encourages and incentivizes higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. Additional policies and actions throughout the Land Use and Mobility Elements promote reductions in VMT through the mix and density of land uses, walkable neighborhood design, bicycle facilities and infrastructure, the expansion of trail networks, and public transportation facilities and infrastructure. Specifically, the proposed Land Use Element includes Policy LU-1.1 which promotes an appropriate land use plan that promotes efficient development and multiple transportation options. The proposed Mobility Element contains Policy M-3.1, which requires the City to apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities); Policy M-3.2, which requires the City to pursue multi-modal connectivity; Policy M-5.3, which requires new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage; Policy M-6.1, which requires the City to implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles; Policy M-6.2, which requires the City to coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities; Policy M-6.3, which requires the City to allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision. While these policies and actions would further assist the City in reducing GHG emissions, the associated reduction of GHG emissions are not quantifiable. Because of this, the City cannot state with certainty whether implementation of the General Plan Update would meet the 2030 and 2045 community emissions targets.

Overall, the proposed Project would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions. While compliance with relevant regulations and implementation of the proposed General Plan Updates' goals, policies and actions would reduce GHG emissions, the associated reductions of GHG emissions are not quantifiable. Therefore, it cannot be guaranteed that the implementation of the General Plan Update, as well as the individual

development projects associated with implementation of the proposed Project, would generate emissions consistent with the State's long-term goals for reducing GHG emissions in the State of California, particularly the net-zero target as promulgated under AB 1279. As such, the City cannot state with certainty whether implementation of the General Plan Update would meet the State's community emissions target. The proposed Project would have a cumulatively significant and unavoidable adverse impact in regards to greenhouse gas emissions.

GENERAL PLAN UPDATE GOALS, POLICIES, AND ACTIONS:

LAND USE ELEMENT

Policy LU-1.1: Sustainable Land Use Pattern. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: Balance Jobs and Housing. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.4: Commercial Corridors. Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

MOBILITY ELEMENT

Policy M-3.1: Complete Streets for Roadway Projects. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: Multimodal Connectivity. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-5.1 Transit Use. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2 Improve Local Public Transit Services. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: Transit Facilities. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Action M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Policy M-6.1: Bicycle Master Plan. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: Local Travel Network. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.3: Hawthorne Boulevard Sidewalks. Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

Policy M-6.4: Sidewalk and Bikeway Gaps. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: Bicycle/Pedestrian Facilities at New Developments. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: Effects of New Technologies on Active Transportation. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaced, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.2: Transportation Demand Management. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3: Regional Coordination. Encourage regional agencies such as Metro, South Coast Air Quality Management District (SCQAMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4: New Development. Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a: Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b: Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: Air Quality and Greenhouse Gas Emissions. Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: Regional Cooperation. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: Measurement and Enforcement. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: GHG Emissions. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: Transportation Options. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: Walkability. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: Land Use Planning. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: Sensitive Receptors. Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: Mitigation. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: GHG Reduction. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: Public Engagement. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24

standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NO_X emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option

to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: Energy Resources. A community that safely manages its energy resources.

Policy RM-5.1: Compliance with State Legislation. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: Green Building Standards Code. Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: Renewable Energy. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: Energy-Efficient Materials. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: Energy Conservation. Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: Energy Needs. Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: Business Community. Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: Public Education. Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: Promote Energy Conservation in Existing Building Stock. Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

SECTION V
CUMULATIVE IMPACTS

Regarding the General Plan's potential to result in cumulative impacts, the City hereby finds as follows:

A. AESTHETICS

Threshold: Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?

Finding: Less than significant. (Draft EIR, Section 5.1.6, pages 5.1-14 through 5.1-15)

Explanation: The Planning Area does not contain any scenic vistas or scenic resources; long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains are limited and primarily provided along major north-south corridors due to the existing development within the City and surrounding area. The Planning Area, and the surrounding areas, are developed and within an urbanized area. Development and/or redevelopment of the Planning Area would be subject to the regulations and requirements of the City's Zoning Code, including building heights, setbacks, massing, and design and architectural regulations, while projects in the SOI would be subject to the County's standards and requirements. Future development projects in the City would be subject to the City's development standards, site plan and/or design review process to ensure conformance with City's established development standards. Although the potential for new development at higher densities/intensities could occur with implementation of the Project, scenic vistas and resources do not readily occur within the City and long-range views are limited due to the existing topography and urbanized nature of the area. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to aesthetics. With implementation of the adopted policies and regulations, the proposed General Plan Update would not considerably contribute to permanent changes in visual character, such as obstruction of scenic views. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on visual character to a less-than-significant level. Thus, the Project's incremental effects involving the potential for substantial adverse effects on a scenic vista would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Finding: No impact. (Draft EIR, Section 5.1.6, pages 5.1-15)

Explanation: As there are no officially designated or eligible scenic highways located within the viewshed of the Planning Area, future development and cumulative development associated with implementation of the General Plan Update would not substantially damage scenic resources within a State scenic highway. Thus, the Project's incremental effects involving the potential for substantial damage to scenic resources within a State scenic highway would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?

Finding: Less than significant. (Draft EIR, Section 5.1.6, pages 5.1-15 through 5.1-16)

Explanation: Future development and cumulative development are located within the Planning Area and are therefore within an "Urbanized Area." Implementation of the General Plan Update would result in new development and intensification of existing urban uses along major corridors. While the Project does not include any specific development proposals, the Project could facilitate future development projects within these areas at higher densities and intensities than currently exist. Development within the City is subject to the Lawndale Zoning Code, which provides for project-specific design review of future development proposals, which would ensure that development is consistent with the General Plan Update goals, policies, and actions, and the Zoning Code. Individual development projects are reviewed subject to the specific zoning district and development being proposed. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to scenic quality. The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Thus, the Project's incremental effects involving potential conflicts with applicable zoning and other regulations governing scenic quality would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Finding: Less than significant. (Draft EIR, Section 5.1.6, pages 5.1-19 through 5.1-20)

Explanation: Future development associated with the General Plan Update and development in the surrounding communities could introduce new sources

of light or glare with the potential to adversely affect day or nighttime views. All lighting installed in future development projects would be subject to conformance with the General Plan Update and applicable Zoning Code requirements. Additionally, pursuant to Chapter 17.30, future residential development projects would be reviewed for conformance with the City's established design criteria, including project illumination. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to aesthetics. With implementation of the adopted policies and regulations, the proposed General Plan Update would not considerably contribute to permanent changes in visual character, such as increased lighting resulting in a substantial degradation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on lighting and glare to a less-than-significant level. Thus, through compliance with the City's established regulatory requirements, the Project's incremental effects involving the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area would not be cumulative considerable.

B. AGRICULTURAL RESOURCES

Threshold: Would the project, combined with other related cumulative projects, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: No impact. (Draft EIR, Section 5.2.5, pages 5.2-7 through 5.2-8)

Explanation: The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The FMMP classifies the Planning Area as Urban and Built-Up Land. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP. Additionally, there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map and the Planning Area does not contain land under agricultural production. Therefore, the proposed Project would have no impact involving the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use and as a result would not contribute to a potential cumulative impact in this regard.

Threshold: Would the project, combined with other related cumulative projects, conflict with existing zoning for agricultural use, or a Williamson Act contract?

Finding: No impact. (Draft EIR, Section 5.2.5, page 5.2-8 through 5.2-9)

Explanation: The Planning Area, along with the cumulative project sites, is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Planning Area does not contain land under agricultural production, nor are any parcels within the Planning Area under a Williamson Act contract. Because the City does not have any zoning districts exclusive to agriculture uses, the General Plan Update, and subsequent zoning code update, would not conflict with existing zoning for agricultural use. Therefore, the proposed Project would have no impact involving a conflict with existing zoning for agricultural use, or a Williamson Act contract, and as a result would not contribute to a potential cumulative impact in this regard.

Threshold: Would the project, combined with other related cumulative projects, involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Finding: No impact. (Draft EIR, Section 5.2.5, page 5.2-8 through 5.2-9)

Explanation: The Planning Area, along with the cumulative project sites, is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. There are no forest lands within the Planning Area, nor are there suitable environmental conditions for forest land to be developed; therefore, implementation of the proposed Project will not result in the conversion of forest land to non-forest use. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP; there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map; and the Planning Area does not contain land under agricultural production. Therefore, the proposed Project would have no impact involving the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and as a result would not contribute to a potential cumulative impact in this regard.

C. AIR QUALITY

Threshold: Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?

Finding: Less than significant. (Draft EIR, Section 5.3.6, pages 5.3-43)

Explanation: The City of Lawndale continues to coordinate with SCAQMD and SCAG to ensure Citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Additionally, the General Plan Update includes

policies and actions to further minimize potential impacts to air quality in support of the AQMP. Therefore, the operation of the proposed General Plan Update would not conflict with or obstruct the implementation of the applicable air quality plan and impacts would be less than significant.

Threshold: Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or state ambient air quality standard?

Finding: Significant and Unavoidable. (Draft EIR, Section 5.3.6, pages 5.3-43 through 5.3-44)

Explanation: Construction-related daily emissions would exceed the SCAQMD significance thresholds for VOCs, NOx, CO, PM10, and PM2.5. Potential operational emissions for the proposed Project would also exceed regulatory thresholds (for VOC, NOx, CO, PM10, and PM2.5). Feasible mitigation measures are incorporated into the policies and actions included within the General Plan Update. However, there are no feasible criteria air pollutant reduction measures beyond those identified within the policies and actions identified that would reduce impacts. While implementation of these policies and actions would reduce criteria pollutant emissions, the extent to which impacts would be generated by future development and infrastructure projects have to be determined on a project-by-project basis, as necessary. Moreover, with respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the policies and actions listed above would mitigate and reduce such emissions. However, as there is no way to determine the extent to which these regulations would be, or need to be, implemented, it is impossible to determine if potential impacts would be reduced to below regulatory thresholds because the details and potential emissions levels of future development projects is not known at this time, as there are no specific development projects proposed as part of the General Plan Update. Additionally, there are no known feasible mitigation measures beyond the policies and actions listed above. Therefore, localized operational impacts, construction and operational health, and toxic air impacts would remain significant and unavoidable.

With respect to other emissions, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. However, as there is no way to determine the extent to which these regulations would be, or need to be, implemented, it is impossible to determine if potential impacts would be reduced to below

regulatory thresholds. As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. Based on these impacts, the General Plan Update would contribute to a cumulative impact with regard to air quality in the region and within the air basin (i.e. the South Coast Air Basin) as a whole. Therefore, this impact is considered a cumulatively considerable and significant and unavoidable impact.

Threshold: Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?

Finding: Significant and Unavoidable. (Draft EIR, Section 5.3.6, pages 5.3-44 through 5.3-45)

Explanation: With respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the General Plan Update policies and actions listed above would mitigate and reduce such emissions. However, the exact location, type, nature, and size of future projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time, as the details of potential future projects are not currently known. As such, there is no way to determine the extent to which these regulations will be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. Additionally, as project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. Therefore, this impact is considered a cumulatively considerable and significant and unavoidable impact.

Threshold: Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Finding: Less than Significant. (Draft EIR, Section 5.3.6, pages 5.3-45)

Explanation: With respect to potential sources that may emit odors during construction and operations, future developments under the General Plan Update would be required to comply with the CARB requirements, SCAQMD rules, the City's Municipal Code, and the proposed General Plan Update policies and actions. As a result, the implementation of the General Plan Update would not result in a cumulatively considerable contribution to cumulative odor impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project implementation would not contribute to a

cumulatively considerable objectionable odors affecting a substantial number of people within the City; impacts would be less than significant in this regard.

D. BIOLOGICAL RESOURCES

Threshold: Would the project, combined with other related cumulative projects, have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Would the project, combined with other related cumulative projects, a have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Would the project, combined with other related cumulative projects, have a substantial adverse effect on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Finding: Less than significant. (Draft EIR, Section 5.4.6, pages 5.4-19 through 5.4-21)

Explanation: The City is highly urbanized and is not known to support any significant wildlife or native planning communities or species. The potential for the Project to have a substantial adverse effect on any special status species, riparian habitat or sensitive natural community or wetlands is less than significant as these resources do not generally occur within the Planning Area. Future development within the City could involve the removal of trees, which may have the potential to impact nesting migratory birds. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements for removal. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects. Any future development would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, and adopted regulations pertaining to biological resources, as appropriate. With implementation of the adopted policies and regulations described above, the proposed General Plan Update would not considerably contribute to adverse effects to biological resources, including special status plant or wildlife species, riparian habitat or other sensitive natural community, or any State or Federally protected wetlands. The polices and

actions included within the General Plan Update and compliance with existing regulations would reduce the cumulative effect of the General Plan Update on biological resources to a less than significant level. Thus, the proposed Project's incremental effects involving special status plant or wildlife species, riparian habitat or other sensitive natural community, or any State or Federally protected wetlands would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Finding: Less than significant. (Draft EIR, Section 5.4.6, page 5.4-21)

Explanation: The Planning Area, along with the surrounding region, are predominantly developed or paved and any landscaping consists primarily of ornamental and/or non-native plant species and do not provide for habitat linkages. The Dominguez Channel is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project as well as the cumulative projects do not involve any direct or indirect physical changes or modifications to the channel. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to biological resources. The proposed General Plan Update would not considerably contribute to interference of wildlife movement or impede the use of native wildlife nursery sites. Thus, the proposed Project's incremental effects involving the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites would not be cumulatively considerable

Threshold: Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Finding: Less than significant. (Draft EIR, Section 5.4.6, pages 5.4-21 through 5.4-22)

Explanation: Site-specific development is not currently proposed as part of the Project; however, future development associated with implementation of the Project would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan Update goals and policies, as appropriate. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements

for removal. Similarly, cumulative development within the region would be required to comply with any agency-specific policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Future development within the City and cumulative development would be assessed for consistency with the agency-specific Municipal Code and General Plan Update goals, policies, and actions. Since the Project would not conflict with any local policies or ordinances protecting biological resources, the Project's incremental effects would not be cumulatively considerable in this regard.

Threshold: Would the project, combined with other related cumulative projects, conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Finding: Less than significant. (Draft EIR, Section 5.4.6, page 5.4-22)

Explanation: The Planning Area is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Thus, the Project's incremental effects involving a conflict with any of these plans would not be cumulatively considerable.

E. CULTURAL RESOURCES

Threshold: Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Finding: Less than significant. (Draft EIR, Section 5.5.6, page 5.5-17)

Explanation: Previously recorded historic built environment resources have been identified within the City. Additionally, due to the age of development within the City, there is the potential for eligible historical resource sites to be located within the Planning Area. Future development and cumulative development within the Planning Area has the potential to impact known and potentially eligible historical resources. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to historical resources. This would include studies of historical resources that are present or could be present within a development site. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Additionally, the General Plan Update Resource Management Element includes policies and actions that would address historical resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General

Plan Update on historical resources to a less than significant level. Based on the above, the Project's incremental contribution to cumulative historical resource impacts would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Finding: Less than significant. (Draft EIR, Section 5.5.6, pages 5.5-17 through 5.5-18)

Explanation: No previously recorded cultural resources have been identified within the City; however, undiscovered archeological sites may be located within the Planning Area. Future development and cumulative development within the Planning Area has the potential to impact previously undiscovered archaeological resources. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to archaeological resources. This would include studies of archaeological resources that are present or could be present within a development site. Additionally, related projects would be subject to compliance with the established Federal, State, and local regulatory framework concerning the protection of cultural resources on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Additionally, the General Plan Update Resource Management Element includes policies and actions that would address archeological resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on archeological resources to a less than significant level. Based on the above, the Project's incremental contribution to cumulative archaeological resource impacts would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?

Finding: Less than significant. (Draft EIR, Section 5.5.6, page 5.5-18)

Explanation: Although unlikely, there is the potential that previously undiscovered human remains could be encountered during construction activities associated with future development within the Planning Area. Future development projects would be required to comply with the established State regulatory framework regarding human remains. Related cumulative projects would undergo environmental review on a project-by-project basis to evaluate the site-specific archaeological sensitivity. Additionally, related projects would be subject to compliance with the established State and local

regulatory framework, including the General Plan Update policies and actions, concerning the discovery of human remains on a project-by-project basis. The proposed Project's compliance with the regulatory framework regarding the discovery of human remains would reduce potential Project impacts to a less than significant level; thus, the Project's incremental contribution to cumulative impacts to human remains would be less than cumulatively considerable.

F. ENERGY

Threshold: Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Finding: Less than significant. (Draft EIR, Section 5.6.6, page 5.6-18)

Explanation: As future development projects are received and reviewed by the City in subsequent years, those projects would be reviewed for consistency with the General Plan Update and all relevant State-level programs and requirements. All future projects must implement the most current version of the Title 24 energy efficiency requirements, as required by State law. Consistency with the General Plan Update and other mandatory State-level programs would ensure that future project-level contributions to inefficient, wasteful or unnecessary energy use would be less than significant. Moreover, as identified above, buildout of the General Plan Update would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, the proposed General Plan Update's incremental contribution to cumulative energy impacts would be less than cumulatively considerable.

G. GEOLOGY AND SOILS

Threshold: Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Finding: Less than significant. (Draft EIR, Section 5.7.6, page 5.7-26)

Explanation: There are no designated Alquist-Priolo fault zones within the Planning Area. Future development and cumulative development would be required to comply with CBSC, and each project within the City would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code,

and other regulations. Therefore, the proposed Project would not contribute to cumulative impacts related to potential adverse effects involving rupture of a known earthquake fault and impacts in this regard are not cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction?

Finding: Less than significant. (Draft EIR, Section 5.7.6, pages 5.7-26 through 5.7-27)

Explanation: The Project proposes a comprehensive update to the City's General Plan, including a revised Land Use Map. Buildout associated with the General Plan Update Land Use Map would allow for new or increased residential and non-residential development within specific areas of the City when compared to existing conditions, potentially exposing people to strong seismic ground shaking or seismic-related ground failure. The Planning Area is not located within a mapped liquefaction zone, as delineated by the CGS. Future development and cumulative development would generally experience similar ground shaking associated with seismic activity. Future development within the Planning Area and cumulative projects would be required to conduct a site-specific geotechnical study to determine the geotechnical feasibility of the specific development being proposed at that time. Any recommendations presented in the geotechnical study would be required to be incorporated into the design and construction of the future development. Future development and cumulative development would be required to comply with all applicable regulations in the most recent CBSC, which includes design requirements to mitigate the effects of potential hazards associated with seismic ground shaking and liquefaction. The Lawndale Building and Safety Services Division would review construction plans for compliance with the CBSC and Lawndale Municipal Code, as well as the geotechnical study's recommendations. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to geologic hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on geologic hazards to a less-than-significant level. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving strong seismic ground shaking or seismic-related ground failure, including liquefaction would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?

Finding: Less than significant. (Draft EIR, Section 5.7.6, pages 5.7-27 through 5.7-28)

Explanation: Future development sites and cumulative development sites within the City and surrounding areas may contain soils that have erosion potential. Implementation of the construction activities associated with Project implementation and cumulative development projects would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. However, the Planning Area is primarily urbanized with limited pervious areas; new development would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Due to the limited pervious areas that occur within the Planning Area, it is not anticipated that Project implementation would increase impervious areas resulting in increased runoff when compared to existing conditions. Site specific geology and soil conditions would be evaluated on a project-by-project basis. All future residential development associated with the proposed Project and cumulative projects within the region would be required to comply with stormwater runoff and pollution control requirements required by the RWQCB and implemented by the specific jurisdiction in which the development occurs. Construction activities within the City would be required to comply with the Lawndale Municipal Code which implements erosion and siltation control measures of the Construction General Permit, reducing potential impacts associated with soil erosion or the loss of topsoil during construction activities. Additionally, future development and cumulative development would be required to comply with postconstruction runoff pollution reduction BMPs implemented through the SUSMP. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to stormwater runoff and other causes of soil erosion. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on soil erosion and loss of topsoil to a less-than-significant level. Thus, the Project's incremental effects involving substantial soil erosion or the loss of top soil would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Finding: Less than significant. (Draft EIR, Section 5.7.6, page 5.7-28)

Explanation: Due to the generally flat topography within the City and surrounding area, the potential for lateral spreading within the Planning Area is considered to be low. Further, the Planning Area is not identified as having the potential for subsidence. The geotechnical and soil characteristics of future development associated with the Project and any cumulative development within the City would be evaluated on a project-by-project basis and appropriate mitigation measures would be required to reduce potential impacts associated with unstable geologic units or soils. Future development associated with implementation of the proposed Project would be required to prepare a geotechnical study for the specific site being proposed for development. The Lawndale Building and Safety Services Division would review construction plans for compliance with the CBSC and City Municipal Code, as well as the geotechnical study's recommendations. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to geologic hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on geologic hazards to a less-than-significant level. Therefore, the Project's incremental effects involving unstable geologic units or soils would not be cumulatively considerable

Threshold: Would the project, combined with other related cumulative projects, have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Finding: No impact. (Draft EIR, Section 5.7.6, page 5.7-29)

Explanation: Future development within the Planning Area would be required to connect to the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. As such, no impact would occur. Therefore, the Project's incremental effects involving soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Less than significant. (Draft EIR, Section 5.7.6, page 5.7-29)

Explanation: The Planning Area has the potential to contain paleontological resources. Compliance with the City's Municipal Code and implementation of General Plan Update policies and actions would reduce potential impacts to

paleontological resources associated with future construction activities in the Planning Area to a less than significant level. There is also the potential for cumulative project sites within the region to have soils that contain paleontological resources. Construction activities associated with the cumulative projects have the potential to directly or indirectly destroy paleontological resources specific to those development sites. However, these potential impacts are site-specific and generally do not result in cumulative effects. Additionally, individual projects would undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to paleontological resources. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to paleontological resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on paleontological resources to a less than significant level. Therefore, the Project's incremental effects involving paleontological resources would not be cumulatively considerable.

H. GREENHOUSE GAS EMISSIONS

Threshold: Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Finding: Significant and Unavoidable. (Draft EIR, Section 5.8.6, page 5.8-38 through 5.8-39)

Explanation: The topic of GHG emissions is inherently a cumulative impact. Though significance thresholds can be developed by air districts, as well as State and Federal regulatory agencies, these thresholds and their related goals are ultimately designed to effect change at a global level. As demonstrated in the analysis provided above, it cannot be guaranteed that the proposed Project would be consistent with the 2045 GHG target for the State of California and would therefore have a significant and unavoidable impact, even with the implementation of General Plan Update goals, policies and actions.

I. HAZARDS AND HAZARDOUS MATERIALS

Threshold: Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Finding: Less than significant. (Draft EIR, Section 5.9.6, pages 5.9-33 through 5.9-34)

Explanation: Construction activities associated with future development and development associated with the cumulative projects may involve the routine transport, use, or disposal of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law. Implementation of the Project would result in new development and intensification of existing urban uses along major corridors, including Hawthorne Boulevard. The General Plan Update does not introduce new industrial uses or allow for the intensification of existing industrial uses. The land uses anticipated by the Project and cumulative development projects do not typically involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations, which would ensure that risks involving the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes would be less than significant. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects involving hazards associated with the routine transport, use, or disposal of hazardous materials would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Finding: Less than significant. (Draft EIR, Section 5.9.6, pages 5.9-34 through 5.9-35)

Explanation: Future development sites associated with implementation of the Project and cumulative development sites within the City could create a significant hazard to the public or the environment through upset and accident conditions involving the release of hazardous materials into the environment. Implementation of construction activities associated with

Project implementation and cumulative development projects would involve some demolition, mass grading, excavation, and other ground-disturbing activities that could temporarily create a significant hazard to the public or the environment through release of hazardous materials. Future site-specific development would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects involving hazards associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Finding: Less than significant. (Draft EIR, Section 5.9.6, page 5.9-35)

Explanation: Future development sites associated with implementation of the Project and cumulative development sites within the City may emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school during construction phases. All future use, storage, transport, and disposal of hazardous materials associated with the proposed Project and cumulative projects within the City and region would be would be governed by existing regulations of several agencies, including DTSC, EPA, U.S. DOT, Cal/OSHA, and the LACoFD Health Hazardous Materials Division. Site-specific development would adhere to standard construction practices to ensure that any hazardous materials released are appropriately contained and remediated as required by local, State, and Federal law. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. All development within the City is required to adhere to existing regulations which ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations would reduce

potential impacts to schools within the area. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects involving emission of hazardous materials within a one-quarter mile of a school would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Finding: Less than significant. (Draft EIR, Section 5.9.6, pages 5.9-35 through 5.9-36)

Explanation: Future development associated with implementation of the Project and cumulative projects would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of Federal, State, and local regulations, including the DTSC and the Los Angeles RWQCB, prior to construction. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving hazardous materials sites would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: Less than significant. (Draft EIR, Section 5.9.6, pages 5.9-36 through 5.9-37)

Explanation: Future development associated with Project implementation and cumulative development could impair implementation of or physically interfere with an adopted emergency response plan. Implementation of construction activities associated with Project implementation and cumulative development projects could temporarily interfere with emergency response

plans or emergency evacuation plans. Major arterials within the City generally serve as the primary routes for evacuation. However, evacuation routes would depend upon the emergency event and location. While all residential developments currently meet City evacuation standards, the City would continue to coordinate with LACoFD and the County Sheriff to provide ongoing education to residents about how to safely evacuate in the event of an emergency.

As site-specific development is not currently proposed, it is unknown if implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. Proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the LACoFD would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or emergency evacuation plan. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to emergency response and evacuation. Thus, the Project's incremental effects involving interface of emergency plans would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, combined with other related cumulative projects, result in significant cumulative impacts with respect to wildfire?

Finding: Less than significant. (Draft EIR, Section 5.9.6, page 5.9-37)

Explanation: The Project's incremental contribution to cumulative wildfire hazard impacts would not be significant. The City is highly urbanized and future development and redevelopment activities in the City would occur in areas that have been previously developed. As a result, the degree of wildland fire hazard, including secondary hazards such as post-fire flooding and debris flow, would not substantially change with adoption of the General Plan Update, and current hazards would not significantly increase. There are no SRA or FHSZs mapped within the Planning Area. New development would be required to comply with the Fire Code and would be reviewed by LACoFD to ensure fire safety is addressed. Additionally, the General Plan includes policies and programs to address public safety and emergency services, including fire protection. Accordingly, the Project's incremental contribution to cumulative wildfire impacts would be less than cumulatively considerable.

J. HYDROLOGY AND WATER QUALITY

Threshold: Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Finding: Less than significant. (Draft EIR, Section 5.10-6, page 5.10-36)

Explanation: Future development associated with implementation of the Project and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. For projects within the City disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants. Regional projects disturbing less than one acre would be required to comply with the SUSMP and/or applicable jurisdictional-level BMPs to reduce the discharge of pollutants.

Additionally, future Project development and cumulative development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future development and cumulative development would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Section 13.16.060, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 13.16.070, Control of Erosion of Slopes and Channels, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110, Maintenance of Best Management Practices, requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs.

Future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update

on hydrology and water quality to a less-than-significant level. Thus, the proposed Project's incremental effects involving a violation of water quality standards or waste discharge requirements, or a substantial degradation of surface water or groundwater quality, would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Finding: Less than significant. (Draft EIR, Section 5.10-6, page 5.10-37)

Explanation: The General Plan Update does not include any site-specific development, but would enable future residential and non-residential development and is expected to result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies. The Basin is managed by an adjudication and subject to the Judgment managed by the Watermaster, which ensures ongoing management of the Basin and assures the Basin will be capable of supplying sufficient water to meet local needs, including future growth and development. The Planning Area and surrounding area is primarily urbanized with limited pervious areas anticipated for development. Although future development and cumulative development have the potential to increase impervious areas, these areas are limited and do not provide for substantial groundwater recharge within the Planning Area and surrounding areas. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including water conservation measures and LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on groundwater to a less than significant level. Therefore, the proposed Project's incremental effects involving a substantial decrease in groundwater supplies or substantial interference with groundwater recharge is not cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

Finding: Less than significant. (Draft EIR, Section 5.10-6, pages 5.10-37 through 5.10-39)

Explanation: *Erosion and Siltation*

Future development associated with implementation of the Project and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. For projects disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants. Regional projects disturbing less than one acre would be required to comply with the SUSMP and/or applicable jurisdictional-level BMPs to reduce the discharge of pollutants.

Additionally, future development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future development and cumulative development would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Section 13.16.060, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 13.16.070 requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110 requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on hydrology and water quality to a less-than-significant level. Therefore, the proposed Project's incremental effects involving erosion and siltation is not cumulatively considerable.

Surface Runoff and Water Quality

The Planning Area is primarily urbanized with limited pervious areas anticipated for development. Although future development and cumulative development have the potential to increase impervious areas, Federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with future and cumulative development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard. Therefore, the proposed Project's incremental effects involving or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems is less than cumulatively considerable.

Future Project development and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Lawndale Municipal Code Chapter 17.88 promotes establishes requirements and standards for water efficient landscapes in new and substantially altered or expanded existing development projects, including the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SUSMPs, SWPPPs, and to implement BMPs. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on hydrology and water quality to a less-than-significant level. Therefore, the proposed Project's incremental effects involving substantial additional sources of polluted runoff would be less than cumulatively considerable.

Flood Flows

The Planning Area is highly urbanized and primarily developed with residential and non-residential uses. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. Flood impacts are site specific and generally do not combine to result in cumulative impact. Additionally, there are no

mapped flood hazard zones located within the Planning Area. Pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project. Therefore, the proposed Project's incremental effects involving impeding or redirecting flood flows would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Finding: Less than significant. (Draft EIR, Section 5.10-6, pages 5.10-39 through 5.10-40)

Explanation: Flood impacts are site specific and generally do not combine to result in cumulative impacts. There are no mapped flood hazard zones located within the Planning Area. The Planning Area is approximately three miles inland of the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. There are no dams with the potential to inundate the Planning Area according to the Division of Safety of Dams Dam Breach Inundation Maps. Although there is a man-made lake within close proximity to the Planning Area, the lake does not generate a significant seiche risk to the Planning Area due to its size and the flat topography of the area. As a result, tsunamis and seiches do not pose hazards to the Planning Area. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure projects. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs, which would reduce the risk of release of pollutants due to inundation within the Planning Area. Therefore, the proposed Project's incremental effects involving the risk of release of pollutants due to project inundation would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Finding: Less than significant. (Draft EIR, Section 5.10-6, pages 5.10-40 through 5.10-41)

Explanation: The local water quality control plan (Basin Plan), maintained by the Los Angeles RWQCB, specifies the State's water quality standards (i.e.,

beneficial uses, water quality objectives, and antidegradation policy) and serves as the basis for the RWQCB's regulatory programs. Future development and cumulative development projects would be required to comply with the provisions of applicable NPDES permits and water quality permitting, consistent with the Basin Plan. Therefore, the proposed Project's incremental effects involving implementation of a water quality control plan is less than cumulatively considerable.

The Planning Area is located entirely within the West Coast Basin and subject to the West Coast Judgment. The West Coast Judgment provides for the legal and practical means of ensuring that the waters of the Basin are sustainably managed and put to maximum beneficial use. The Project does not propose site-specific development. Future development and cumulative development projects would be subject to the West Coast Judgment. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs, implementation of LID BMPs, and water conservation measures. Therefore, the proposed Project's incremental effects involving obstruction of implementation of a sustainable groundwater management plan is less than cumulatively considerable.

K. LAND USE AND PLANNING

Threshold: Would the project, combined with other related cumulative projects, physically divide an established community?

Finding: Less than significant. (Draft EIR, Section 5.11.5, page 5.11-25)

Explanation: Development of cumulative projects in the City of Lawndale would be required to mitigate land use impacts on a project-by-project basis. Each project would be evaluated for consistency with the project site's General Plan land use designation and zoning, adopted General Plan goals, policies, and actions, and other applicable regional land use plans, such as SCAG's RTP/SCS. The proposed General Plan Update would result in less than significant impact related to land use and relevant planning. Therefore, the incremental impact of the proposed Project, when considered in combination with development within the City and region, would not result in cumulatively considerable land use impacts. The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area, but would not create physical division within the community. The proposed General Plan Update does not include any new roadways, infrastructure, or other features that would divide existing communities. Each individual development project would be reviewed to determine its consistency and compatibility with the surrounding area and its potential to physically divide an established community. As the Project would not

physically divide an established community, the Project's incremental effects would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Finding: Less than significant. (Draft EIR, Section 5.11.5, pages 5.11-25 through 5.11-26)

Explanation: The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. As demonstrated throughout the Draft EIR, the proposed Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection, and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan Update would require modifications to the City's Zoning Code to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely alter portions of the Lawndale Municipal Code that were adopted to mitigate an environmental effect. Similar to future development associated with the proposed Project, cumulative development projects would be evaluated for consistency with the project site's General Plan land use designation and zoning; General Plan goals, policies, and actions; and other applicable plans for the purpose of avoiding or mitigating an environmental effect. As analyzed in the Draft EIR, the proposed Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Thus, the proposed Project's incremental effects would not be cumulatively considerable.

L. MINERAL RESOURCES

Threshold: Would the project, combined with other relative cumulative projects, result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Finding: Less than significant. (Draft EIR, Section 5.12.5, page 5.12-4)

Explanation: The majority of land within the Planning Area is designated as MRZ-1, land where no significant mineral deposits are present, with a smaller portion designated as MRZ-3, land for which the significance of mineral resources

cannot be determined. The land within the MRZ-3 is currently developed and is within a highly urbanized area, indicating there is little to no potential for resource extraction from the MRZ-3 area. Further, there are no known mineral deposits or resources in the Planning Area that are of significant value to the region or the State. Therefore, implementation of the proposed General Plan Update, in combination with other relevant cumulative projects, would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.

Threshold: Would the project, combined with other relative cumulative projects, result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Finding: No impact. (Draft EIR, Section 5.12.5, page 5.12-4)

Explanation: The Planning Area does not contain any locally-important mineral resource recovery sites delineated on local general plans, specific plans and other land use plans. As such, future development projects, in combination with other relative cumulative projects, would not result in the loss of availability of a locally-important mineral resource recovery site. Impacts would not be cumulatively considerable.

M. NOISE

Threshold: Would the project, combined with other related cumulative projects, generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Finding: Less than significant. (Draft EIR, Section 5.13.6, pages 5.13-32 through 5.13-34)

Explanation: *Transportation Noise Impacts*

Table 5.13-11 in the Draft EIR shows the cumulative noise levels associated with traffic on the local roadway network, including projects within the Planning Area. Cumulative conditions include traffic due to 2045 buildout of the General Plan Update in addition to pass-through traffic from other jurisdictions. Table 5.13-12 in the Draft EIR shows the estimated noise level increases which may occur under cumulative conditions. As shown in Table 5.13-11 and Table 5.13-12 in the Draft EIR, by the year 2045, existing land uses adjacent to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level. As shown in Table 5.13-

12 in the Draft EIR, compared to existing traffic noise levels, 2045 without Project traffic volumes are expected to be up to 0.8 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise along the analyzed roadways. Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to traffic noise.

Stationary Noise

While the Project does not explicitly propose any new noise-generating uses, implementation of the Project could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. Implementation of land use planning and policies and actions can minimize cumulative noise impacts related to stationary sources by avoiding the placement of noise generating equipment near noise-sensitive land uses and where unavoidable, including design measures to the degree practicable to avoid violating the noise criteria presented in Table PS-1 of the General Plan Update and the Lawndale Municipal Code. The General Plan Update includes policies and actions that are intended to reduce noise associated with stationary sources. Applicants of future development projects would be required to demonstrate compliance with the City's Noise Ordinance and the policies and actions in the proposed General Plan Update Public Safety Element, including proposed Policies PS-6.3, PS-6.4, PS-6.8, and proposed Actions PS-6c, PS-6d, and PS-6e. Conformance with the existing regulatory framework would reduce cumulative noise impacts from stationary noise sources to a less than significant level. Therefore, the proposed Project's incremental contribution to cumulative impacts associated with stationary noise would not be cumulatively considerable.

Construction Noise

Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. Each construction project would have to comply with the local noise ordinance and General Plan Update policies and actions, including Policy PS-6.9,which requires construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices, and Action PS-6f, which requires all construction activity to comply with the limits established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible. Additionally, projects would comply with mitigation measures that may be prescribed pursuant to CEQA provisions that require significant

impacts to be reduced to the extent feasible. Further, it is unlikely that all construction projects would occur simultaneously within the City. Therefore, the proposed Project's incremental contribution to cumulative impacts associated with construction noise would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?

Finding: Less than significant. (Draft EIR, Section 5.13.6, page 5.13-34)

Explanation: Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. The General Plan Update includes policies and actions that are intended to reduce groundborne vibration and groundborne noise levels. In order to reduce potentially significant impacts related to groundborne vibration associated with construction activities of future site-specific development, project applicants would be required to comply with proposed General Plan Update Public Safety Element Policy PS-6.14 and Action PS-6k, which require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations. With implementation of the General Plan Update, potential significant impacts associated with the proposed Project related to construction vibration would be reduced to less than significant. Cumulative development projects within the City would also be reviewed to ensure project-specific construction activities would not generate excessive groundborne vibration or noise levels. If it is determined that site-specific development associated with the cumulative projects would result in groundborne vibration or noise impacts, mitigation measures would be required to reduce the impact. As the Project's potential for vibration impacts would be reduced to a less than significant level, the proposed Project's incremental contribution to cumulative impacts associated with construction vibration would not be cumulatively considerable.

Threshold: For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project, combined with other related cumulative projects, expose people residing or working in the project area to excessive noise?

Finding: No impact. (Draft EIR, Section 5.13.6, pages 5.13-34 through 5.13-35)

Explanation: The noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne. The Planning Area is not

located within any adopted airport land use plan and is located outside of any airport 65 dBA CNEL contours. As such, there are no impacts related to private airports, public airports, airstrips, or adopted airport land use plans. Therefore, proposed Project's incremental contribution to cumulative impacts associated with airport noise would not be cumulatively considerable.

N. POPULATION AND HOUSING

Threshold: Would the project, combined with other related cumulative projects, induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes, and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Finding: Less than significant. (Draft EIR, Section 5.14.6, page 5.14-13)

Explanation: Although implementation of the General Plan Update would provide for increased population growth within the Planning Area when compared to SCAG's growth forecasts, the proposed Project is intended to accommodate the City's fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by HCD on a regular basis (every five to eight years). SCAG's Connect SoCal growth forecasts through 2045 do not currently consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. However, the regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts. The land uses allowed under the proposed General Plan Update provide opportunities for infill development in the Planning Area, primarily in the Hawthorne Boulevard Specific Plan area, but would not create physical division within existing communities. New development and redevelopment projects would be designed to complement the character of existing neighborhoods and provide connectivity between existing development and new development within the cumulative analysis area. The proposed General Plan Update does not include any new roadways, infrastructure, or other features that would divide existing communities. Moreover, with implementation of General Plan Update policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout the Draft EIR. Therefore, the proposed General Plan Update's incremental contribution to cumulative population impacts would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Finding: Less than significant. (Draft EIR, Section 5.14.6, page 5.14-14)

Explanation: Implementation of the General Plan Update would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Sites designated with the Housing Opportunity Overlay have existing non-residential uses. The Project does not propose any site-specific development at this time; therefore, no existing residents would be displaced. Development and redevelopment of the identified parcels would occur gradually over time. The General Plan Update establishes goals, policies, and actions to ensure the compatibility of new and existing development, including housing. Therefore, the proposed General Plan Update's incremental contribution to cumulative impacts associated with displacement of people or housing would be less than cumulatively considerable.

O. PUBLIC SERVICES

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection and Emergency Services?

Finding: Less than significant. (Draft EIR, Section 5.15.5, pages 5.15-23 through 5.15-24)

Explanation: LACoFD provides fire protection services to the Planning Area. In addition, cumulative projects within the City would receive fire protection services from LACoFD. Similar to future development associated with Project implementation, cumulative development projects would be required to comply with standard LACoFD conditions of approval. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate. Project implementation may require new or the expanded fire protection facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded fire protection facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new

development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Future development within the City and LACoFD service area would be reviewed to determine whether the development being proposed would require new or expanded facilities with the potential for causing significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services, including fire protection, and fire hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of fire facilities to a less than significant level. Thus, the Project's incremental impacts to the provision of fire protection services would not be cumulatively considerable.

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Police Protection?

Finding: Less than significant. (Draft EIR, Section 5.15.5, pages 5.15-24 through 5.15-25)

Explanation: LASD provides police protection services to the Planning Area. In addition, cumulative projects within the City would receive police protection services from LASD. Similar to future development associated with the Project, the LASD would review cumulative development projects development plans and applicants would be required to comply with any specific conditions related to safety and security specified by the LASD. Project implementation may require new or the expanded police protection facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded police facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered

police facilities, or the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts. Future development within the City would be reviewed to determine whether the development being proposed would require new or expanded facilities with the potential for causing significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services, including police protection. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of sheriffs' facilities to a less than significant level. Thus, the Project's incremental impacts to the provision of police protection services would not be cumulatively considerable.

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools?

Finding: Less than significant. (Draft EIR, Section 5.15.5, pages 5.15-25 through 5.15-26)

Explanation: Students generated by the implementation of the Project, combined with other relevant cumulative projects within the City and LESD and CVUHSD service areas would combine to result in increased demand on schools within the area. The exact location of future development and associated student generation is currently unknown. Future development associated with the Project is anticipated to occur gradually through 2045 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually as additional development occurs in the Planning Area. Future residential development associated with implementation of the Project would be required to comply with SB 50, which would fully mitigate potential impacts related schools. Similarly, the cumulative development projects would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, to accommodate future students. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of school facilities to a less-than-significant level. Therefore, the Project's

incremental impacts relative to the provision of schools would not be cumulatively considerable.

Threshold: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Other Public Facilities?

Finding: Less than significant. (Draft EIR, Section 5.15.5, pages 5.15-23 through 5.15-24)

Explanation: Future Project development and cumulative development may result in the need for additional LA County Library resources and other public facilities. Future development is assumed to occur over time through 2045; thus, any increase in demand for public services would occur gradually as additional development and associated population growth is added to the City. The General Plan Update includes policies to ensure that library services are adequately funded, are coordinated between the City and the LA County Library, and that new development funds its fair share of services. Similar to the Project, cumulative development projects within the City would be required to comply with the General Plan Update policies and the established regulatory framework regarding the payment of fees. Any future development of library facilities or other public facilities to serve demand associated with implementation of the proposed Project and cumulative projects would be required to comply with applicable regulations, policies, and standards, and would be subject to CEQA review as appropriate. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of libraries and other public facilities to a less than significant level. Thus, the Project's incremental impacts relative to the provision of other public facilities would not be cumulatively considerable.

P. PARKS AND RECREATION

Threshold: Would the project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?

Would the Project, combined with other relevant cumulative projects, increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Would the Project, combined with other relevant cumulative projects, include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Finding: Less than significant. (Draft EIR, Section 5.16.5, pages 5.16-11 through 5.16-12)

Explanation: Future development associated with the General Plan Update, combined with other relevant cumulative projects, would bring new residents to the Planning Area. These new residents are expected to use existing park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. Additionally, the additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have potential environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan Update, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Although implementation of the Project would cause an increase in demand for parks in the future, potential impacts could be reduced to a less than significant level through the payment of park fees, as established in Municipal Code Chapter 12.34, and adherence to local regulations established in the Municipal Code and General Plan Update policies and actions, which support the creation of new parks and recreation facilities, to accommodate a wide range of activities for all age groups. Similarly, cumulative development projects would be required to comply with Municipal Code and General Plan Update policies regarding parks and recreation facilities, including compliance with CEQA associated with any site-specific development of parks or recreational facilities. Thus, the Project's incremental impacts associated with parks and recreational facilities would not be cumulatively considerable.

Q. TRANSPORTATION

Threshold: Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the

circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Finding: Less than significant. (Draft EIR, Section 5.17.6, page 5.17-33)

Explanation: The Project is a programmatic land use plan and is not proposing any changes to the circulation system. Any future development within the City would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Therefore, the Project's incremental contribution to cumulative impacts related to transit, roadway, bicycle, and pedestrian facilities would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Finding: Less than significant. (Draft EIR, Section 5.17.6, pages 5.17-33 through 5.17-34)

Explanation: As described in Section 5.17 of the Draft EIR, with implementation of the General Plan Update under the City's cumulative buildout conditions, the 2045 Project VMT per capita is approximately 28 percent less than the existing Los Angeles countywide average VMT per capita and the 2045 Project VMT per employee is approximately 18 percent less than the existing Los Angeles countywide average VMT per employee. With implementation of the Project, the City's VMT per capita would not exceed 15 percent below the Los Angeles countywide average. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to VMT. A significant cumulative VMT impact would occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the 2020 RTP/SCS. As discussed, the Project would be consistent with the SCAG's 2020 RTP/SCS and would contribute toward furthering the goals of SCAG's 2020 RTP/SCS. As the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG's 2020 RTP-SCS goals, the proposed Project's incremental contribution to cumulative VMT impacts would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: Less than significant. (Draft EIR, Section 5.17.6, page 5.17-34)

Explanation: The types of uses that would be allowed as part of Project implementation

are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Planning Area and in the surrounding area. Additionally, site-specific developments would be reviewed by the City to ensure adequate ingress and egress would be provided and site distance standards would be implemented. Implementation of the Project would therefore not contribute to a cumulatively considerable impact relative to an increase in hazards due to a geometric design feature.

Threshold: Would the project, combined with other related cumulative projects, result in inadequate emergency access?

Finding: Less than significant. (Draft EIR, Section 5.17.6, pages 5.17-34 through 5.17-35)

Explanation: A cumulatively significant project impact would occur if implementation of the Project with cumulative projects would result in inadequate emergency access. As noted, the Project does not propose site-specific development; emergency accessibility is typically assessed at the project level. The Project does not propose changes to the citywide roadway network and configuration that would affect local emergency access. The proposed Project along with the cumulative development projects could result in the temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. Any temporary closure would be required to comply with the Lawndale Municipal Code. Similarly, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review all development projects for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Therefore, the proposed Project's incremental contribution to cumulative impacts relative to emergency access would not be cumulatively considerable.

R. TRIBAL CULTURAL RESOURCES

Threshold: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Finding: Less than significant. (Draft EIR, Section 5.18.6, page 5.18-10 through 5.18-11)

Explanation: Tribal cultural resource impacts are site specific and generally do not combine to result in cumulative impacts. Construction of the individual development projects allowed under the land use designations of General Plan Update may result in the discovery and removal of tribal cultural resources. The General Plan Update policies and actions, as well as Federal, State, and local regulations, would reduce the risk to tribal cultural resources in the region. Site-specific development with the potential to impact tribal cultural resources would require a resource assessment and coordination with the tribes to determine the potential for tribal cultural resources and identification of mitigation measures to reduce potential impacts associated with the proposed development. Adherence to the General Plan Update policies and actions, and existing Federal, State and local regulations would avoid and/or minimize a cumulative loss of tribal cultural resources. Therefore, the General Plan Update's incremental contribution to cumulative tribal cultural resource impacts would be less than cumulatively considerable.

S. UTILITIES AND SERVICE SYSTEMS

Threshold: Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, or have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Finding: Less than significant. (Draft EIR, Section 5.19.6, pages 5.19-46 through 5.19-47)

Explanation: Water service in the Planning Area is provided by the GSWC. In addition to the Project, cumulative projects within the City would receive water service from GSWC. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the GSWC. Additionally, Lawndale Municipal Code Section 3.14.090 imposes a tax on water users in the City and would help fund necessary infrastructure improvements. The specific impacts of providing new and expanded facilities cannot be

determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded water facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Planning Area and would be required to pay applicable development impact fees to ensure water facilities can be constructed/expanded, if necessary. Further, the General Plan Update includes policies and actions related to the provision of utilities and water conservation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on water facilities to a less than significant level. Thus, the Project's incremental impacts to water facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies. Similar to future development associated with Project implementation, cumulative development projects would require an analysis of sufficient water supplies through provisions in SB 610 and/or the CEQA process. Additionally, future development associated with the Project and cumulative projects would be required to comply with existing Federal, State, and local regulations, including the Municipal Code, to conserve water and ensure the efficient use of available water supplies. Further, the General Plan Update includes policies and actions related to the provision of utilities and water conservation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on water supplies to a less than significant level. Thus, the Project's incremental impacts to water supplies would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Finding: Less than significant. (Draft EIR, Section 5.19.6, pages 5.19-47 through 5.19-48)

Explanation: The City and LACSD provide wastewater services to the Planning Area. In addition to the Project, cumulative projects within the City would be provided wastewater services by the City and LACSD. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the City and LACSD. The City would review

each site to determine if sufficient local and trunk sewer capacity exists to serve each specific development project. Pursuant to Lawndale Municipal Code Section 13.08.070, a building permit would not be issued if the anticipated sewage from a proposed project is found by the City Engineer to exceed the capacity available in the public sewer. Lawndale Municipal Code Chapter 13.08 provides for sewer connection and facilities expansion fees for the City's local wastewater transmission lines. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded wastewater facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Planning Area and would be required to pay applicable development impact fees to ensure wastewater facilities can be constructed/expanded, if necessary, to ensure adequate capacity to serve the proposed development. Further, the General Plan Update includes policies and actions related to the provision of utilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on wastewater facilities to a less-than-significant level. Thus, the Project's incremental impacts to wastewater facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Planning Area, and a corresponding increase in the flow of wastewater requiring treatment. The Project enables additional development but does not include specific development proposals. At the time future projects are proposed, they would be required to ensure adequate wastewater treatment capacity exists. Additionally, LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand wastewater services, including wastewater treatment. Thus, the Project's incremental impacts to wastewater would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?

Finding: Less than significant. (Draft EIR, Section 5.19.6, page 5.19-48)

Explanation: Storm drain infrastructure in the Planning Area is owned and operated by the City and the LACFCD. The Planning Area is primarily developed, with limited areas of pervious surfaces. Similar to the Project, cumulative projects have the potential to slightly increase impervious areas within specific areas of the Planning Area. However, due to the urbanized nature of the Planning Area, the majority of development activities associated with

cumulative development would consist of infill and redevelopment on currently urbanized sites and would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements.

The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development under the proposed Project. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the Municipal Code, and other applicable regulations. Further, the General Plan Update includes policies and actions related to the provision of public facilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on stormwater facilities to a less than significant level. Thus, the Project's incremental impacts to stormwater would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Finding: Less than significant. (Draft EIR, Section 5.19.6, pages 5.19-48 through 5.19-49)

Explanation: The City is within the service areas of SCE, SoCalGas, and various telecommunication providers. The Planning Area is primarily developed and includes existing electrical, natural gas, and telecommunications infrastructure. Similar to the Project, cumulative projects have the potential to increase demand for electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The specific impacts of providing new and expanded electrical, natural gas, and telecommunications services cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review, as required, related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future development

associated with the Project and cumulative projects would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the Municipal Code, and other applicable regulations, including the General Plan Update. The General Plan Update includes policies and actions related to the provision of utilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on natural gas, electrical, and telecommunications facilities to a less than significant level. Thus, the Project's incremental impacts to electrical, natural gas, or telecommunications would not be cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and comply with Federal, state, and local management and reduction statutes and regulations related to solid waste?

Finding: Less than significant. (Draft EIR, Section 5.19.6, pages 5.19-49 through 5.19-50)

Explanation: Similar to the Project, cumulative projects have the potential to increase solid waste generated within the Planning Area. The Lawndale Municipal Code, Chapter 8.28 establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Republic Services) to handle the City's solid waste and cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Republic and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by the AB 939. Future development associated with the Project and cumulative projects would be required to implement existing regulations, including the Municipal Code, to comply with regulations related to solid waste and ensure the permitted capacity of landfills serving the City is not exceeded. Further, the General Plan Update includes policies and actions related to solid waste, including source reduction. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on solid waste to a less than significant level. Thus, the Project's incremental impacts to solid waste would not be cumulatively considerable.

T. WILDFIRE

Threshold: Would the project, combined with other related cumulative projects, substantially impair an adopted emergency response plan or emergency evacuation plan?

Finding: Less than significant. (Draft EIR, Section 5.20.5, pages 5.20-17 through 5.20-18)

Explanation: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE and County regulatory maps. Therefore, future development associated with implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Additionally, future development associated with implementation of the Project and cumulative projects would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The County OAERP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Los Angeles County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. Future development associated with implementation of the Project and cumulative projects would be subject to similar fire protection development standards and would be required to comply with each jurisdiction's established regulatory framework, including the respective municipal code and General Plan policies and programs to assist in protecting life and property in the event of a wildfire. The Project's would not contribute to cumulative wildfire hazard impacts. Thus, the Project and cumulative development projects' incremental effects involving an adopted emergency response plan or emergency evacuation plan would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Finding: Less than significant. (Draft EIR, Section 5.20.5, page 5.20-18)

Explanation: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE and County regulatory maps. Therefore, future development associated with implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas. Future development and cumulative development would be required to

comply with the Fire Code, which would further minimize and reduce impacts related to wildfire. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. As part of the City's development review process, the LACoFD would review all projects for related fire hazards. Wildfire risks would not change with adoption of the General Plan Update, and exposure to pollutant concentrations from wildfire for occupants in the Planning Area would not significantly increase. Accordingly, the Project's incremental contribution to wildfire risks exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Finding: Less than significant. (Draft EIR, Section 5.20.5, page 5.20-18 through 5.20-19)

Explanation: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE regulatory maps. Therefore, future development associated with implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Future development and cumulative development could require the eventual construction and installation of new infrastructure or maintenance of existing infrastructure, including roads, water and sewer, and power lines to serve increased growth and development. Maintenance of existing infrastructure and the potential installation of new infrastructure for future development and cumulative development would be required to comply with Fire Code requirements and would be reviewed by the LACoFD to determine the specific fire requirements applicable to ensure compliance with the Fire Code. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. Thus, the Project's incremental contribution involving potential wildland fire hazards due to the installation or maintenance of local infrastructure would be less than cumulatively considerable.

Threshold: Would the project, combined with other related cumulative projects, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Finding: Less than significant. (Draft EIR, Section 5.20.5, page 5.20-19 through 5.20-20)

Explanation: Future development associated with implementation of the Project and cumulative projects would be subject to similar fire protection development standards and would be required to comply with each jurisdictions established regulatory framework, including the respective municipal code and General Plan policies and programs to assist in protecting life and property in the event of a fire. The Project's incremental contribution to cumulative wildfire hazard impacts would not be significant. The City is highly urbanized and future development and redevelopment activities in the City under would occur in areas that have been previously developed. As a result, the degree of wildland fire hazard, including secondary hazards such as post-fire flooding and landslides, would not substantially change with adoption of the General Plan Update, and current hazards would not significantly increase. Additionally, there are no SRA or FHSZs mapped within the Planning Area. As such, the General Plan Update does not approve, propose, or authorize development in an SRA or FHSZ per CAL FIRE and County regulatory maps. New development would be required to comply with the Fire Code, which would further minimize and reduce impacts related to potential fires within the City. As part of the City's development review process, the LACoFD would review all projects for fire related hazards. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. Accordingly, the Project's incremental contribution involving significant risks as a result of runoff, post-fire slope instability, or drainage changes would be less than cumulatively considerable.

SECTION VI
FINDINGS REGARDING SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Sections 15126(c) and 15126.2(d) of the CEQA Guidelines require that an EIR address any significant irreversible environmental changes that would occur should the project be implemented. Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Consumption of Nonrenewable Resources

Future development would consume limited, slowly renewable and non-renewable resources. This consumption would occur during each individual project's construction phase and would continue throughout its operational lifetime. Future development would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to and from individual development sites. Construction would require the consumption of resources that are not renewable or which may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The operational activities of new development accommodated through implementation of the General Plan Update would consume resources which would be similar to those currently consumed within the City (i.e., energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water). Fossil fuels would represent the primary energy source associated with both construction and ongoing operation, and the existing, finite supplies of these natural resources would be incrementally reduced. Future development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. Nonetheless, the proposed Project's energy requirements would represent a long-term commitment of essentially non-renewable resources.

Construction activities associated with implementation of the General Plan Update could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions; refer to Section 5.9 in the Draft EIR. All potential demolition, grading, and excavation activities would be subject to the established regulatory framework to ensure that hazardous materials are not released into the environment. Compliance with the established regulatory framework and mitigation measures would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials. In addition, there is the potential that individual future development projects would use and store limited amounts of potentially hazardous materials typical. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable Federal, State, and local regulations and standards in place for hazardous materials. Compliance

with these regulations and standards would protect against significant and irreversible environmental changes due to the accidental release of hazardous materials.

In conclusion, future construction and operations would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of the individual developments. It is noted that the continued use of such resources would be on a relatively small scale in a regional context.

Irretrievable Commitments/Irreversible Physical Changes

Implementation of the General Plan Update would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the Project would result in irretrievable commitments by designating land for development that is more intense, in some instances, than current designations allow. Additionally, residential development would be allowed on land not currently designated for residential development. Development would physically change the environment in terms of aesthetics, air emissions, noise, and traffic. These physical changes are irreversible after development occurs. Therefore, the Project would result in changes in land use within the Planning Area that would commit future generations to these uses.

In summary, the General Plan Update includes an extensive policy framework that is designed to address land use and environmental issues to the greatest extent feasible, while allowing growth and economic prosperity for the City. Construction and operation of future development projects associated with Project implementation would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources that would limit the availability of these resource quantities for future generations or for other uses during the life of the Project. However, the Planning Area is an urbanized area and already uses such resources. Additionally, the continued use of such resources would be on a relatively small scale in a regional context. As such, although irreversible environmental changes would result from the Project, such changes would not be considered significant.

SECTION VII
GROWTH-INDUCING IMPACTS

Section 15126.2(e) of the CEQA Guidelines requires a Draft EIR to evaluate the growth-inducing impacts of a proposed action. The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement. Growth-inducing impacts fall into two general categories: direct or indirect. Direct growth-inducing impacts are generally associated with new residences or businesses that could induce population growth directly. Indirect growth-inducing impacts provide urban services, such as the extension or roads or other infrastructure, to an undeveloped area that could induce population growth indirectly.

In general, a project may foster spatial, economic, or population growth in a geographic area if it results in any of the following:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering of economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an infill project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing.

The Planning Area and surrounding area are fully developed and urbanized. Transportation and infrastructure exists to serve the range of residential and non-residential uses within the surrounding area. The General Plan Update does not introduce new roadways or new or significantly expanded infrastructure that would provide for additional development within the surrounding area. Potential infrastructure improvements associated with future site-specific development would not remove obstacles to growth since the Planning and surrounding area are already served by existing utility providers and potential improvements would be to serve the specific development being proposed. As the General Plan Update would not establish an essential public service or provide new access to an area, the proposed Project would not be considered growth-inducing.

In addition to residential uses, the Project anticipates the development of commercial uses within the Planning Area. The construction of future development projects would result in construction-related jobs. However, construction activities and durations would vary depending upon the specific development and would be temporary in respect to each individual development site and therefore, would not be considered growth-inducing.

Project operations would introduce new residents and jobs to the Planning Area. Future development associated with implementation of the General Plan Update would primarily consist of infill development and redevelopment of already developed sites. New residential development could occur and greater densities, providing additional housing opportunities that would further support commercial and retail uses within the City. Additional non-residential development would provide for new employment opportunities. Residents and employees would seek shopping, entertainment, employment, and other economic opportunities in the City and surrounding area. This could create an increased demand for goods and services that would encourage the creation of new businesses or the expansion of existing businesses. Although economic growth is anticipated within the Planning Area, significant economic growth resulting in the potential to significantly affect the environment is not anticipated as the surrounding area is urbanized.

As shown in Table 3-4 of the Draft EIR buildout of the General Plan Update through 2045 could yield up to 3,942 new housing units and 808,864 square feet of new non-residential building square footage within the Planning Area. Project implementation would exceed the population projections anticipated by SCAG's growth forecasts. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The General Plan Update is intended to implement the City's 2021-2029 Housing Element; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts.

Although the Project would allow for currently unplanned population growth anticipated in the existing General Plan and by SCAG, the Draft EIR identifies General Plan Update goals, policies, and actions, where appropriate, that would serve to reduce or eliminate potentially significant impacts associated with specific environmental issues associated with growth. Sections 5.1 through 5.20 in the Draft EIR provide a discussion of environmental effects associated with development allowed under the General Plan Update. With implementation of General Plan Update goals, policies, and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the General Plan Update would result a less than significant impact.

The General Plan is a long-term plan intended to accommodate projected population, housing, and employment growth, including the appropriate balance among these factors with the necessary public services and infrastructure. The proposed General Plan Update would serve as a comprehensive, long-term plan for the physical development of Lawndale. The proposed General Plan Update would only regulate future land development within the Planning Area and would not induce growth within areas outside of the City's jurisdiction. Any future development within the Planning Area would be reviewed in light of the General Plan and this General Plan Update EIR

pursuant to CEQA on a project-by-project basis. Future development would be required to comply with the goals, policies, and actions intended to reduce potential environmental impacts associated with future site-specific development. Thus, Project implementation would not involve a precedent-setting action that could significantly impact the environment.

The Planning Area is located within an urbanized area. Park and open space resources within the City are limited and primarily associated with parks and schools. The Project does not propose modifications to these existing resources and would not result in encroachment into these areas. The Project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of an existing open space.

SECTION VIII
ALTERNATIVES

A. BACKGROUND

The Draft EIR analyzed two alternatives to the Project as proposed and evaluated these alternatives for their ability to avoid or reduce the Project's significant environmental effects while also meeting the majority of the Project's objectives. This section sets forth the potential alternatives to the Project analyzed in the EIR and evaluates them in light of the Project objectives, as required by CEQA.

Where significant impacts are identified, section 15126.6 of the State CEQA Guidelines requires EIRs to consider and discuss alternatives to the proposed actions. Subsection (a) states:

> (a) An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Subsection 15126.6(b) states the purpose of the alternatives analysis:

> (b) Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

In subsection 15126.6(c), the State CEQA Guidelines describe the selection process for a range of reasonable alternatives:

> (c) The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination.

> Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

The range of alternatives required is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed Project. Alternatives are limited to ones that would avoid or substantially lessen any of the significant effects of the Project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the Project.

B. PROJECT OBJECTIVES

The following objectives have been established for the Project (Draft EIR, pages 3-5 through 3-6):

1. Reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by City residents, businesses, decision-makers, and other stakeholders;
3. Protect Lawndale's existing residences, character, and sense of community;
4. Proactively plan for and accommodate local and regional growth in a responsible manner;
5. Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
6. Allow for a range of high-quality housing options;
7. Attract and retain businesses and industries that provide jobs for local residents;
8. Continue to maintain and improve multimodal transportation opportunities;
9. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
10. Address new requirements of State law; and
11. Address emerging transportation, housing, and employment trends.

C. ALTERNATIVES CONSIDERED BUT REJECTED FROM DETAILED ANALYSIS

Section 15126.6(c) of the State CEQA Guidelines specifies that an EIR should (1) identify alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process; and (2) briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; and/or (iii) inability to avoid significant environmental impacts.

There were no alternatives considered but rejected from detailed analysis in the EIR.

D. EVALUATION OF ALTERNATIVES SELECTED FOR ANALYSIS

The alternatives selected for further detailed review within the EIR focus on alternatives that could potentially reduce the Project's significant environmental impacts, while still meeting most of the basic Project objectives. Those alternatives include:

- **Alternative 1: No Project Alternative/Existing General Plan** (Draft EIR, pages 7-4 through 7-15)
- **Alternative 2: Reduced Growth Alternative** (Draft EIR, pages 7-15 through 7-25)

1. Alternative 1: No Project Alternative

Description: Under Alternative 1, the City would continue to implement the existing General Plan and no changes would be made to address updated OPR General Plan Guidelines, or the requirements of State law. Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions. Additionally, the City recently updated its 2021-2029 Housing Element (adopted in February 2022), and the existing General Plan does not conform to State requirements regarding planning for future housing growth. The General Plan goals, policies, and actions, as well as the Land Use Map, would not be updated to address the vision and concerns of the City's residents, property owners, decision-makers, and other stakeholders that actively participated in the visioning and goal and policy development process.

Alternative 1 would result in the continuation of existing conditions and development levels. New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map. Alternative 1 (No Project/Existing General Plan Alternative) would result in less development within the Planning Area compared to the proposed Project. Under Alternative 1, the existing General Plan policy framework would still be in effect, which would constitute a status quo approach to land use regulation in the City. The Proposed Land Use Map, along with the policy framework proposed by the General Plan Update, encourages and aims to achieve a community with a balanced land use pattern that meets the City's long-term housing, employment, and civic needs. The land uses allowed under the General Plan Update provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area. A balanced land use pattern would create a community where new development blends with existing neighborhoods. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection. The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

Alternative 1 would not include updated policies, particularly those related to housing,

greenhouse gases, hazards, complete streets, and environmental justice to address environmental health concerns for disadvantaged communities, as required by State law. This alternative would not include policies proposed in the General Plan Update to ensure protection of environmental resources, both at a project level and under cumulative conditions, consistent with the objectives of CEQA.

Impacts: As shown in Draft EIR Table 7-4, Alternative 1 would result in the same impacts as the proposed Project for the environmental issues of: Agricultural Resources, Hydrology and Water Quality, Mineral Resources, Transportation, and Wildfire. Alternative 1 would result in reduced impacts to Air Quality, Energy, Greenhouse Gas Emissions, Noise, Public Services and Recreation, Utilities and Service Systems, and Irreversible Effects. Alternative 1 would result in increased impacts to Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Land Use and Planning, Population and Housing, and Tribal Cultural Resources. This alternative would fail to reduce any significant and unavoidable impacts to a less than significant level.

Attainment of Project Objectives: This alternative would not meet most of the Project objectives, including the following: reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders; address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders; proactively plan for and accommodate local and regional growth in a responsible manner; encourage mixed-use development patterns that promote vibrant commercial and residential areas; allow for a range of high-quality housing options; attract and retain businesses and industries that provide jobs for local residents; continue to maintain and improve multimodal transportation opportunities; address new requirements of State law; and address emerging transportation, housing, and employment trends.

Finding: The City Council rejects Alternative 1: No Project Alternative/Existing General Plan, on the following grounds, which provides sufficient justification for rejection of this alternative: (1) the alternative fails to meet most of the Project objectives; (2) the alternative fails to avoid or reduce the Project's significant and unavoidable impacts to a less than significant level; (3) this alternative fails to comply with State law specific to General Plan requirements; and (4) this alternative would not provide the necessary residential densities for housing development to allow the City to meet its RHNA obligations and could be cause for HCD's approval of the Housing Element to be rescinded.

2. Alternative 2: Reduced Growth Alternative

Description: Alternative 2 (Reduced Growth Alternative) continues to allow for new development in mixed-use opportunities, like those included in the proposed Project, but at lower densities that are more consistent with those allowed under the current General Plan. The goals, policies, and actions of the General Plan Update would apply to subsequent development, planning, and infrastructure projects under this alternative. This Alternative was developed to reduce the severity of potential impacts related to air quality and greenhouse gas emissions, as overall development of residential uses within the Planning Area would be less than what could under the proposed Project.

Alternative 2 would result in approximately 1,603 fewer housing units and 3,639 fewer residents within the Planning Area when compared to the proposed General Plan Land Use Map. Nonresidential development potential and employment opportunities would remain the same under this alternative when compared to the proposed General Plan Update. In the 2021-2029 Housing Element, the City introduced two new mechanisms to allow for residential development to be created to implement the Housing Element on sites considered viable for housing development. The first is "Housing Overlay 100", which will be applied to 16 nonresidential sites outside of the Hawthorne Boulevard Specific Plan area and allow for residential densities of up to 100 dwelling units per acre. The second is "Housing Overlay 150" which will be applied to 68 nonresidential sites inside the Hawthorne Boulevard Specific Plan area, will allow for residential densities up to 150 dwelling units per acre. This Alternative assumes that the 2021-2029 Housing Element would be in non-compliance, since it would not implement these mechanisms at the planned densities.

Impacts: As shown in Draft EIR Table 7-4, Alternative 2 would result in the same impacts as the proposed Project for the environmental issues of: Aesthetics, Agricultural Resources, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Mineral Resources, Population and Housing, Tribal Cultural Resources, and Wildfire. Alternative 2 would result in reduced impacts to Air Quality, Energy, Greenhouse Gas Emissions, Land Use and Planning, Noise, Public Services and Recreation, Utilities and Service Systems, and Irreversible Effects. Alternative 2 would result in increased impacts to Transportation. This alternative would fail to reduce any significant and unavoidable impacts to a less than significant level.

Attainment of Project Objectives: Alternative 2 would not meet some of the Project objectives, including: proactively plan for and accommodate local and regional growth in a responsible manner; allow for a range of high-quality housing options; address new requirements of State law; and address emerging transportation, housing, and employment trends.

Finding: The City Council rejects Alternative 2: Reduced Growth Alternative, on the following ground, which provides sufficient justification for rejection of this alternative: (1) the alternative fails to meet all of the Project objectives; (2) the alternative fails to avoid or reduce the Project's significant and unavoidable impacts to a less than significant level; and (3) this alternative would not be consistent with the planned residential densities in the 2021-2029 Housing Element and could be cause for HCD's approval of the Housing Element to be rescinded.

E. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the State CEQA Guidelines indicates that an analysis of alternatives to a proposed Project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR. Based on the alternatives analysis contained within the Draft EIR, Alternative 2 (Reduced Growth Alternative) is identified as the Environmentally Superior Alternative.

Alternative 2 (Reduced Growth Alternative) is the environmentally superior alternative as it is the most effective in terms of overall reductions of impacts compared to the proposed General Plan Update and Alternative 1 (No Project Alternative/Existing General Plan). Alternative 2 meets most of the Project objectives. Like the proposed Project, Alternative 2 reflects the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders; addresses issues and concerns identified by City residents, businesses, decision-makers, and other stakeholders; protects Lawndale's existing residences, character, and sense of community; encourages mixed-use development patterns that promote vibrant commercial and residential areas; attracts and retains businesses and industries that provide jobs for local residents; continues to maintain and improve multimodal transportation opportunities; and maintains strong fiscal sustainability and continues to provide efficient and adequate public services. However, the alternative fails to meet several Project objectives, including: proactively plan for and accommodate local and regional growth in a responsible manner; allow for a range of high-quality housing options; address new requirements of State law; and address emerging transportation, housing, and employment trends. In addition, Alternative 2 fails to avoid or reduce the Project's significant and unavoidable impacts to a less than significant level and would not be consistent with the planned residential densities in the 2021-2029 Housing Element and could be cause for HCD's approval of the Housing Element to be rescinded. Therefore, City Council rejects the environmentally superior alternative.

SECTION IX
ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to State CEQA Guidelines Section 15093(a), the City Council must balance, as applicable, the economic, legal, social, technological, or other benefits of the Project against its unavoidable environmental risks in determining whether to approve the Project. If the specific benefits of the Project outweigh the unavoidable adverse environmental effects, those environmental effects may be considered acceptable.

Having reduced the adverse significant environmental effects of the Project to the extent feasible through the implementation of the General Plan Update goals, policies, and actions; having considered the entire administrative record on the Project; the City Council has weighed the benefits of the Project against its unavoidable adverse impacts after mitigation in regards to air quality and greenhouse gas emissions. While recognizing that the unavoidable adverse impacts are significant under CEQA thresholds, the City Council nonetheless finds that the unavoidable adverse impacts that will result from the Project are acceptable and outweighed by specific social, economic and other benefits of the Project.

In making this determination, the factors and public benefits specified below were considered. Any one of these reasons is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the City Council would be able to stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this section, and in the documents found in the Records of Proceeding.

The City Council therefore finds that for each of the significant impacts which are subject to a finding under CEQA Section 21081(a)(3), that each of the following social, economic, and environmental benefits of the Project, independent of the other benefits, outweigh the potential significant unavoidable adverse impacts and render acceptable each and every one of these unavoidable adverse environmental impacts:

1. The General Plan Update promotes more compact, environmentally-sustainable, and equitable development through goals, policies, and actions that balance the need for adequate infrastructure, housing, economic vitality, and environmental justice with the need for resource management, environmental protection, and preservation of quality of life for Lawndale residents.

2. The General Plan Update implements principles of sustainable growth by concentrating new development and intensification of existing urban uses primarily along key commercial and transportation corridors, thereby providing opportunities for a diverse mix of uses while maintaining the City's residential neighborhoods.

3. The General Plan Update provides a land use map that accounts for existing development, physical constraints, economic development, hazards, and incompatible uses, and assigns densities and use types accordingly to enhance the safety, livability, and economic vitality of Lawndale.

4. The General Plan Update improves mobility options through the development of a multi-modal transportation network that enhances connectivity, supports community development patterns, limits traffic congestion, promotes public and alternative transportation methods, and supports the goals of adopted regional transportation plans.

5. The General Plan Update addresses adverse environmental effects associated with global climate change by facilitating sustainable development, promoting energy efficiency, conserving water resources, and promoting compact development patterns that reduce greenhouse gas emissions.

6. The General Plan Update enhances the local economy and provides opportunities for future jobs and business development commensurate with forecasted growth by planning for a mix of residential and commercial development near existing urbanized areas and transportation corridors.

7. The General Plan Update is the product of a comprehensive public planning effort driven by members of the public, city stakeholders, the Planning Commission and the City Council through a series of public meetings, hearings, and workshops that resulted in a thoughtful balance of community, economic, social, and environmental interests.

Attachment B

Resolution No. CC-2312-048 Adopting of General Plan

RESOLUTION NO. CC-2312-048

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA ADOPTING THE CITY'S GENREAL PLAN 2045.

WHEREAS, state law requires the City of Lawndale ("City") to adopt and maintain a General Plan that contains certain mandatory elements, describes the City's long-term goals and develops policies and programs to achieve those goals; and

WHEREAS, State law allows that the City periodically amend the General plan to ensure that it is consistent with the conditions, values, expectations and needs of its residents, businesses and other stakeholders; and

WHEREAS, the City's General Plan was originally adopted in 1998 and has been updated and amended since adoption in order to address certain changes such as economic, environmental, social, and legal as well as the above-mentioned needs and expectations of stakeholders;

WHEREAS, in conformance with Government Code Section 65300 et sec. the City commenced a comprehensive update to the City of Lawndale General plan; and

WHEREAS, Section 15126, 15417 and 15176 of the California Government Code sets forth the specific components to be contained within the General Plan; and

WHEREAS, California Government Code 65302 requires that all General Plans include 8 State-mandated elements, including land use, circulation, housing, conservation, open space, noise, environmental justice, and safety elements,

WHEREAS, the City's Planning Department staff, with the assistance of a consultant, has prepared the update to the Lawndale General Plan 2045 and Final Environmental Impact Report ("Project"), which document was previously reviewed by the Planning Commission and

WHEREAS, the City is currently undertaking an update to its Hawthorne Boulevard Specific Plan and its zoning codes to establish new land use strategies to accommodate the City's 6th Cycle RHNA and implement the Housing Programs of the 2021-2029 Housing Element which updates will include changes to reflect the Project; and

WHEREAS, the City Council has certified the Final Environmental Impact Report for the Project, and

WHEREAS, a public hearing before the City Council for the Project was properly noticed on November 18, 2023 and set for December 4, 2023; and

WHEREAS, at that public hearing evidence was heard and presented from all persons interested in affecting said Project, from all persons protesting the same and from members of the City staff and the City Council, having reviewed, analyzed and studied said proposal.

WHEREAS, the City Council now desires to adopt the comprehensive update to the City's General Plan 2045, and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The City Council finds and determines that the recitals above are true and correct.

Section 2. The City Council hereby adopts and approves the City's General Plan 2045 comprehensive update.

Section 3. The City Council has certified the Final EIR pursuant to the California Environmental Quality Act and adopted Findings of Fact and a Statement of Overriding Considerations for the General Plan 2045. The City Council hereby incorporates by reference as if fully set forth herein, the Resolution certifying the Final EIR and adopting the Findings of Fact, and Statement of Overriding Considerations for the General Plan 2045.

Section 4. The City Council based on substantial evidence in the record, hereby makes the following findings in support of adoption of the General Plan 2045:

A. State law requires that each city adopt a general plan to describe its long-term goals and policies and programs to achieve those goals. The general plan is often referred to a city's "constitution" for future growth and development as land use decisions, the Zoning Code, development approvals, and other policies of the City must be consistent with the General Plan. The General Plan 2045 outlines a vision for the City's long-term physical and economic development and community enhancement and sets forth goals and policies that will allow this vision to be accomplished. The General Plan 2045 also provides the basis for establishing City priorities for implementing plans and programs.

B. It is in the best interest of public health, safety, and welfare to update the City's General Plan to incorporate current conditions and community goals and to extend the planning horizon to 2045.

C. The General Plan 2045 is consistent with the requirements of the California Government Code regarding General Plans and the General Plan guidelines in effect as of the date of this Resolution, and the General Plan is internally consistent with all of the objectives, policies, general land uses, programs, and actions of all elements of the General Plan 2045. The General Plan 2045 is a comprehensive update of the City's General Plan and includes an update of the existing elements as well as the addition of new elements. The General Plan 2045 addresses all state-mandated elements.

D. The General Plan 2045 is in compliance with the provisions of CEQA. A Final EIR has been prepared for the General Plan 2045 that provides a description of potential environmental impacts of the General Plan 2045, includes mitigation measures to reduce impacts to less than significant levels where feasible, and evaluates alternatives to the General Plan 2045. All interested parties and members of the public were permitted to comment on the Draft EIR during the 45-day public comment period, and the City prepared written responses to comments in accordance with CEQA, which were included in the Final EIR. Neither the changes to the Proposed Project nor the Final EIR constitute significant new information triggering recirculation of the EIR. Pursuant to CEQA Guidelines 15092 and 15093, the City Council finds that it may approve the Proposed

Project despite the remaining significant effects on the environment that are unavoidable as the City Council has determined in its Resolution Certifying the EIR for the General Plan 2045 that any remaining significant effects on the environment that are unavoidable are acceptable due to overriding considerations.

E. The General Plan 2045 will promote the public health, safety, and welfare by establishing goals and policies to guide the City's development within the Planning Area, to ensure an attractive built environment, to protect the natural environment and promote sustainability, and to ensure provision of adequate infrastructure and services.

Section 5. The City Council hereby approves the General Plan 2045 in accordance with the Planning Commissions November 15, 2023 recommendation, set forth in the Planning Commission Resolutions No. 23-07 and 23-08, and has not made substantial modifications to the General Plan 2045 from the Planning Commission's recommendation.

Section 6. The Resolution shall take effect immediately upon its adoption by the City Council, and the Clerk of the Council shall attest to and certify the vote adopting the Resolution.

PASSED, APPROVED AND ADOPTED this 4th day of December 2023

Robert Pullen-Miles, Mayor

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Erica Harbison, City Clerk of the City of Lawndale, California, do hereby certify that the City Council of the City of Lawndale duly approved and adopted the foregoing Resolution No. CC-2312-048 at a regular meeting of said Council held on the 4th day of December 2023, by the following roll call vote:

Name	Voting		Present, Not Voting		Absent
	Aye	No	Abstain	Not Participating	
Robert Pullen-Miles, Mayor					
Sirley Cuevas, Mayor Pro Tem					
Pat Kearney					
Bernadette Suarez					
Rhonda Hofmann-Gorman					

Erica Harbison, City Clerk

APPROVED AS TO FORM:

George Murphy, City Attorney

Attachment C

Planning Commission Resolutions

RESOLUTION NO. 23-07

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LAWNDALE, CALIFORNIA RECOMMENDING THAT THE CITY COUNCIL APPROVE AND CERTIFY THE UPDATE TO LAWNDALE GENERAL PLAN 2045.

WHEREAS, the Planning Commission is charged with the responsibility of reviewing proposed amendments to the City's General Plan; and

WHEREAS, the City's General Plan was originally adopted in 1991 and has been updated and amened to address certain changes such as economic, environmental, social, and legal;

WHEREAS, in conformance with Government Code Section 65300 et se. the City commenced a comprehensive update to the City of Lawndale General plan; and

WHEREAS, Section 15126, 15417 and 15176 of the California Government Code sets forth the specific components to be contained within the General Plan; and

WHEREAS, California Government Code 65302 requires that all General Plans include 8 state mandated elements including land use, circulation, housing, conservation, open space, noise, environmental justice, and safety elements,

WHEREAS, the City's Planning Department staff, with the assistance of a consultant, has prepared the update to the Lawndale General Plan 2045 and Final Environmental Impact Report ("Project"), which document was previously reviewed by the Planning Commission and

WHEREAS, State law allows that the City periodically amend the General plan to ensure that it is consistent with the conditions, values, expectations and needs of its residents, businesses and other stakeholders; and

WHEREAS, the City is currently undertaking an update to its Hawthorne Boulevard Specific Plan and zoning codes to establish new land use strategies to accommodate the City's 6th Cycle Regional Housing Needs Assessment ("RHNA") and implement the Housing Programs of the 2021-2029 Housing Element; and

WHEREAS, the Planning Commission recommends that the City Council pursuant to the California Environmental Quality Act ("CEQA") (Public Resources Code § 21000 *et seq.*), the City certified the Final EIR for the City General Plan 2045, and

WHEREAS, the Planning Commission has considered all information concerning the Project, Case No. 23-19, as set forth in the General Plan and staff reports; and

WHEREAS, Case No. 23-19 was properly noticed and set for public hearing before the Planning Commission on November 15, 2023, and

WHEREAS, evidence was heard and presented from all persons interested in affecting said proposal, from all persons protesting the same and from members of the City staff and the Planning Commission, having reviewed, analyzed and studied said proposal.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE AND RECOMMEND AS FOLLOWS:

Section 1. That the recitals set forth above are true and correct and are incorporated into this resolution by reference.

Section 2. That the Planning Commission intends to address the City's changing needs by implementing the required policies, procedures, and programs contained in the 2045 update to the General Plan, attached hereto and incorporated herein as Exhibit "A."

Section 3. the Planning Commission recommends that the City Council pursuant to the California Environmental Quality Act ("CEQA") (Public Resources Code § 21000 *et seq.*), certifies the Final EIR for the City General Plan 2045

PASSED, APPROVED AND ADOPTED THIS 15th DAY OF NOVEMBER 2023.

Ni Kal Price, Chairperson
Lawndale Planning Commission

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Jared Chavez, Community Development Manager for the City of Lawndale, California, do hereby certify that the foregoing **Resolution No. 23-07** was duly approved and adopted by the Planning Commission of the City of Lawndale at a regular meeting of said Commission held on the **15th day of November 2023** by the following roll call vote:

AYES: **Martinez, Price, Sitka, Smith**
NOES:
ABSENT: **Urrutia**
ABSTAIN:

Jared Chavez,
Community Development Manager

RESOLUTION NO. 23-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LAWNDALE, CALIFORNIA RECOMMENDING THAT THE CITY COUNCIL ADOPT FINDINGS OF FACT AND A STATEMENT OF OVERRIDING CONSIDERATIONS PERSUANT TO THE CALIFONRIA ENVIRONEMENTAL QUALITY ACT (CEQA), CERTIFY THE GENERAL PLAN UPDATE FINAL ENVRIONMENTAL IMPACT REPORT (SCH #202212088), AND APPROVE GENERAL PLAN 2045, AND APPROVING THE PROJECT

WHEREAS, the City of Lawndale (the "City") proposes the Lawndale General Plan 2045 (the "Project), a comprehensive update to the City's existing General Plan; and

WHEREAS, the Project sets the overarching policy document that guides land use, housing, transportation, open space, public safety, community services, and other policy decisions through the City; and

WHEREAS, pursuant to section 210067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14 Section 15000 et. Se.), the City of Lawndale is the lead agency for the proposed Project; and

WHEREAS, prior to the development of the project or environmental documents, the City conducted extensive public outreach hosted 10 public workshops beginning in February 2021 through December 2021. Public workshops included 9 virtual workshops and 1 in person interactive workshop, and

WHEREAS, in accordance with CEQA and the State CEQA Guidelines, the City determined that a Program Environmental Impact Report ("EIR") should be prepared in order to analyze all potential adverse environmental impacts that could potentially result from the adoption and implementation of the proposed Project; and 4.1.a Packet Pg. 70 Attachment: Planning Commission Resolution 23-07 (Lawndale General Plan 2045)

WHEREAS, in accordance with State CEQA Guidelines section 15082, on December 6, 2022, the City sent to the Office of Planning and Research and each responsible and trustee agency a Notice of Preparation ("NOP") stating that an Environmental Impact Report (State Clearinghouse Number #202212088 would be prepared; and

WHEREAS, pursuant to Public Resources Code section 21083.9 and State CEQA Guidelines sections 15082(c) and 15083, the City held a duly noticed Scoping Meeting on December 15, 2022, to solicit comments on the scope of the environmental review of the proposed Project, however, no comments were received during the Scoping Meeting; and

WHEREAS, a Draft Program EIR ("Draft EIR") was prepared, incorporating comments received in response to the NOP ("Exhibit A"); and

WHEREAS, the Draft EIR concluded that the proposed Project would result in significant and unavoidable impacts individual projects anticipated by the General Plan update would be required to implement their own environmental review, and

WHEREAS, in accordance with State CEQA Guidelines section 15085, a Notice of Completion was prepared and filed with the Office of Planning and Research on November 30, 2022; and

WHEREAS, as required by State CEQA Guidelines section 15087(a), the City provided Notice of Availability of the Draft EIR to the public to the Office of Planning and Research, on August 15, 2023; and

WHEREAS, during the public comment period, copies of the Draft EIR and technical appendices were available for review and inspection at City Hall, the City Library, on the City's website, and published in the Press Enterprise; and

WHEREAS, pursuant to State CEQA Guidelines section 15087(e), the Draft EIR was circulated for at least a 45-day public review and comment period from August 15, 2023 to October 2, 2023; and

WHEREAS, during the public review and comment period, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies, and others pursuant to State CEQA Guidelines section 15086; and

WHEREAS, pursuant to Public Resources Code section 21092.5, the City provided copies of its responses to commenting public agencies at least ten (10) days prior to the City's consideration of the Final EIR on October 30, 2023; and

WHEREAS, on October 30, 2023, the City released the Final EIR ("Final EIR"), which consists of the Draft EIR, all technical appendices prepared in support of the Draft EIR, all written comment letters received on the Draft EIR, written responses to all written comment letters received on the Draft EIR, and errata to the Draft EIR and technical appendices; and

WHEREAS, on November 15, 2023, the Planning Commission conducted the public hearing to consider the Draft EIR for the Project and solicited comments on the document. After hearing all relevant testimony from staff, the public and the City's consultant team, the Planning Commission voted to recommend that the City Council certify the EIR for the Project; and

WHEREAS, the "EIR" consists of the Final EIR and its attachments and appendices, as well as the Draft EIR and its attachments and appendices (as modified by the Final EIR); and

WHEREAS, all potentially significant adverse environmental impacts were sufficiently analyzed in the EIR; and

WHEREAS, as contained herein, the City has endeavored in good faith to set forth the basis for its decision on the Project; and

WHEREAS, all of the requirements of the Public Resources Code and the State CEQA Guidelines have been satisfied by the City in connection with the preparation of the EIR which is sufficiently detailed so that all of the potentially significant environmental effects of the Project have been adequately evaluated; and

WHEREAS, the EIR prepared in connection with the Project sufficiently analyzes the Project's potentially significant environmental impacts and the EIR analyzes a range of feasible alternatives capable of reducing these effects to an even lesser level of significance; and

WHEREAS, the City has made certain findings of fact, as set forth in Exhibit C to this Resolution, attached hereto and incorporated herein, based upon the oral and written evidence presented to it as a whole and the entirety of the administrative record for the Project, which are incorporated herein by this reference; and

WHEREAS, the City finds that environmental impacts that are identified in the EIR as less than significant and do not require mitigation are described in in the attached Exhibit C.

WHEREAS, the City finds that there are no environmental impacts that are identified in the EIR that are less than significant with incorporation of mitigation measures as described in Section III of Exhibit C; and

WHEREAS, the City finds that even with the incorporation of all feasible mitigation measures, the environmental impacts that are identified in the EIR that are significant and unavoidable are described in Section IV of Exhibit C; and

WHEREAS, the cumulative impacts of the Project identified in the EIR and set forth herein, are described in Section V of Exhibit C; and

WHEREAS, the potential significant irreversible environmental changes that would result from the proposed Project identified in the EIR and set forth herein, are described in Section VI of Exhibit C; and

WHEREAS, the existence of any growth-inducing impacts resulting from the proposed Project identified in the EIR and set forth herein, are described in Section VII of Exhibit C; and

WHEREAS alternatives to the proposed Project that might further reduce the already less than significant environmental impacts are described in Section VIII of Exhibit C; and

WHEREAS, because the EIR identified significant and unavoidable impacts, the City explains its reasoning for recommending the adoption of the Project despite those impacts in the Statement of Overriding Considerations, as set forth in Section IX of Exhibit C; and

WHEREAS, prior to taking action, the Planning Commission has heard, been presented with, reviewed and considered all of the information and data in the administrative record, (including but not limited to the EIR) and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, the Planning Commission recommends the EIR reflects the independent judgment of the City and is deemed adequate for purposes of making decisions on the merits of the Project; and

WHEREAS, no comments made in the public hearings conducted by the Planning Commission and no additional information submitted to the City have produced substantial new information requiring recirculation of the EIR or additional environmental review of the Project under Public Resources Code section 21092.1 and State CEQA Guidelines section 15088.5; and

WHEREAS, on November 15, 2023, the Planning Commission conducted a duly noticed public hearing on this Resolution, at which time all persons wishing to testify were heard and the Project was fully considered; and Attached Planning Commission Resolution 23-07 (Lawndale General Plan 2045); and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF LAWNDALE, CALIFORNIA, DOES HEREBY RESOLVE AND RECOMMEND AS FOLLOWS:

SECTION 1. The above recitals are true and correct and incorporated herein by reference.

SECTION 2. The Planning Commission hereby finds that it has been presented with the EIR which it has reviewed and considered, and further finds that the EIR is an accurate and objective statement that has been completed in full compliance with CEQA and the State CEQA Guidelines. The Planning Commission finds that the EIR reflects the independent judgment and analysis of the City. The Planning Commission declares that no evidence of new significant impacts or any new information of "substantial importance" as defined by State CEQA Guidelines section 15088.5, has been received by the City after circulation of the Draft EIR that would require recirculation. Therefore, the Planning Commission recommends the City Council certifies the EIR based on the entirety of the record of proceedings.

SECTION 3. The Planning Commission recommends the City Council adopt Resolutions No. CC2312-048 and CC-2312-049 and adopt the "CEQA Findings of Fact" where were prepared in accordance with State CEQA Guidelines sections 15091 and which are attached hereto as Attachment C and incorporated herein by this reference.

SECTION 4. The Planning Commission recommends the City Council adopt Resolutions No. CC2312-048 and CC-2312-049 certifying that the EIR is an accurate and objective statement that has been completed in full compliance with CEQA and the State CEQA Guidelines; reflects the independent judgment and analysis of the City; declares that no evidence of new significant impacts or any new information of "substantial importance" as defined by State CEQA Guidelines section 15088.5, has been received by the City after circulation of the Draft EIR that would require recirculation. Therefore, certifies the EIR based on the entirety of the record of proceedings.

SECTION 5. The Planning Commission recommends the City Council adopt Resolution 23-07 approving City of Lawndale General Plan 2045.

SECTION 6. Based upon the entire record before it, including the EIR, Findings of Fact, and all written and oral evidence presented, the Planning Commission recommends the City Council approve the proposed Project.

PASSED, APPROVED AND ADOPTED THIS 15th DAY OF NOVEMBER, 2023.

Ni Kal Price, Chairperson
Lawndale Planning Commission

ATTEST:

State of California)
County of Los Angeles) SS
City of Lawndale)

I, Jared Chavez, Community Development Manager for the City of Lawndale, California, do hereby certify that the foregoing **Resolution No. 23-08** was duly approved and adopted by the Planning Commission of the City of Lawndale at a regular meeting of said Commission held on the **15th day of November 2023** by the following roll call vote:

AYES: **Martinez, Price, Sitka, Smith**
NOES:
ABSENT: **Urrutia**
ABSTAIN:

Jared Chavez,
Community Development Manager

Attachment D

General Plan

GENERAL PLAN 2045

City of Lawndale

The heart of the Southbay

PUBLIC DRAFT
JULY 2023

TABLE OF CONTENTS

INTRODUCTION

INTRODUCTION IN-1
PURPOSE OF THE GENERAL PLAN IN-2
GENERAL PLAN OBJECTIVES IN-2
SCOPE AND CONTENT OF THE GENERAL PLAN IN-4
PLANNING PROCESS IN-5
PUBLIC PARTICIPATION IN-5
COMMUNITY VISION STATEMENT IN-7
APPLYING THE GENERAL PLAN IN-14
ANNUAL REPORTING IN-16

LAND USE ELEMENT

GOAL LU-1 LAND USE MIX LU-7
GOAL LU-2 MANAGED GROWTH LU-9
GOAL LU-3 LAND USE COMPATIBILITY LU-11
GOAL LU-4 COMMUNITY CHARACTER AND DESIGN LU-13

MOBILITY ELEMENT

GOAL M-1 LOCAL CIRCULATION SYSTEM M-2
GOAL M-2 REGIONAL CIRCULATION M-4
GOAL M-3 COMPLETE STREETS M-5
GOAL M-4 PARKING M-6
GOAL M-5 TRANSIT M-7
GOAL M-6 ACTIVE TRANSPORTATION M-8
GOAL M-7 GOODS MOVEMENT M-9
GOAL M-8 FUNDING M-10
GOAL M-9 TRANSPORTATION MANAGEMENT M-11

RESOURCE MANAGEMENT ELEMENT

GOAL RM-1 PARKS, RECREATION, AND OPEN SPACE RM-2
GOAL RM-2 SOLID WASTE MANAGEMENT AND RECYCLING RM-4
GOAL RM-3 CULTURAL RESOURCES RM-6
GOAL RM-4 AIR QUALITY AND GREENHOUSE GAS EMISSIONS RM-9
GOAL RM-5 ENERGY RESOURCES RM-12
GOAL RM-6 WATER CONSERVATION RM-14

PUBLIC SAFETY ELEMENT

GOAL PS-1 EMERGENCY OPERATIONS PS-4
GOAL PS-2 GEOLOGIC AND SEISMIC HAZARDS PS-6

GOAL PS-3 HAZARDOUS MATERIALS PS-8
GOAL PS-4 FIRE HAZARDS PS-10
GOAL PS-5 FLOOD HAZARDS PS-11
GOAL PS-6 NOISE PS-12
GOAL PS-7 CLIMATE CHANGE AND RESILIENCY PLANNING PS-17

ENVIRONMENTAL JUSTICE ELEMENT

GOAL EJ-1 POLLUTION EXPOSURE AND AIR QUALITY EJ-2
GOAL EJ-2 ACCESS TO PUBLIC FACILITIES EJ-3
GOAL EJ-3 HEALTHY FOOD ACCESS EJ-4
GOAL EJ-4 SAFE AND SANITARY HOMES EJ-5
GOAL EJ-5 PHYSICAL ACTIVITY EJ-7
GOAL EJ-6 CIVIC ENGAGEMENT EJ-8
GOAL EJ-7 IMPROVEMENTS AND PROGRAMS EJ-10

ECONOMIC DEVELOPMENT ELEMENT

GOAL ED-2 SUPPORT AND EXPAND THE BUSINESS COMMUNITY ED-3
GOAL ED-3 WORKFORCE DEVELOPMENT AND RETENTION ED-5
GOAL ED-4 CREATE A VIBRANT HAWTHORNE BOULEVARD ED-6
GOAL ED-5 FISCAL SUSTAINABILITY ED-7

COMMUNITY FACILITIES ELEMENT

GOAL CF-1 INFRASTRUCTURE AND PUBLIC SERVICES CF-2
GOAL CF-2 WATER SYSTEM ..... CF 4
GOAL CF-3 WASTEWATER SYSTEM ..... CF 5
GOAL CF-4 STORMWATER MANAGEMENT ..... CF 6
GOAL CF-5 TELECOMMUNICATIONS ..... CF 8
GOAL CF-6 HEALTH AND HUMAN RESOURCES ..... CF 9

LIST OF FIGURES

FIGURE LU-1 LAND USE MAP LU-15
FIGURE LU-2 PLANNING AREA LU-17
FIGURE LU-3 HAWTHORNE BOULEVARD SPECIFIC PLAN MAP LU-19
FIGURE M-1 FUNCTIONAL CLASSIFICATION M-13
FIGURE M-2 EXISTING AND PLANNED BIKE FACILITIES M-15
FIGURE M-3 LOCAL TRANSPORTATION NETWORK M-17

LIST OF TABLES

TABLE LU-1 GENERAL PLAN LAND USE 2045 POTENTIAL BUILDOUT SUMMARY LU-6
TABLE PS-1 LAND USE COMPATIBILITY FOR COMMUNITY NOISE EXPOSURE (dBA, CNEL) PS-16

Introduction

Since its historic founding in 1905, the City of Lawndale has grown from a small agrarian society into a thriving residential community characterized by its small-town feel, support for local businesses, and convenient location in the heart of the South Bay region of Los Angeles County.

In 2023, over 32,000 people call Lawndale home. Looking forward over the next 20 years, the City will continue to value its existing residents while planning for a prosperous and sustainable future by embracing smart growth and economic development. New opportunities for residential, commercial, and mixed-use development are envisioned alongside quality public services, facilities, and infrastructure. The *Lawndale General Plan* embodies community principles. Through thoughtful planning, Lawndale is prepared to make decisions that support the community's long-term goals, as defined here in the General Plan.

The *Lawndale General Plan* is a dynamic policy document that identifies the community's vision for the future and provides a framework to guide the City's long-term growth and development. The General Plan reflects the community's values and desires and addresses important issues such as land use and urban design; mobility; housing; resource management; public safety; environmental justice; economic development; community facilities and services; and public health. Although it may be updated periodically to reflect changing market conditions, new legislative requirements, and modern local opportunities, the intent of the *Lawndale General Plan* is to lay the foundation for long-term decision-making that stands the test of time.

The Lawndale General Plan is supported and implemented by important complementary plans and programs, including the Hawthorne Boulevard Specific Plan, Zoning Ordinance, and Climate Action Plan. While the General Plan provides high-level guidance on local issues and priorities, these plans and programs implement the General Plan and provide more specific direction regarding critical topics, such as the redevelopment of Hawthorne Boulevard, which serves as the City's primary transportation route, corridor of economic activity, and community focal point; expectations on permitted uses throughout the City; and the City's strategy to support a more resilient and sustainable future. Taken together with the General Plan, these plans and programs chart the path forward for Lawndale for the next 20 years.

Contents:

+ Purpose of the General Plan
+ General Plan Objectives
+ Scope and Content of the General Plan
+ Planning Process
+ Public Participation
+ Community Vision Statement
+ Applying the General Plan
+ Annual Reporting

What is a General Plan?

The general plan serves as a "blueprint" for future development of a city or county. It establishes land use designations and policies to assist decision makers as they review proposals for new development or consider changes to city ordinances. The general plan addresses issues that impact the entire city, such as how land is used, where buildings are built, the locations of roads and parks, safety, noise, and more.

Purpose of the General Plan

In California, all cities and counties are required to adopt a general plan. The general plan is a comprehensive policy document that shapes the long-term physical development of a jurisdiction's planning area. The planning area is the geographic area for which the general plan provides a framework for long-term growth and resource conservation. State law requires the planning area for the general plan to include all territory within the incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300).

The general plan must include eight state-mandated elements including land use, circulation, housing, conservation, open space, noise, environmental justice, and safety elements, as specified in Government Code Section 65302, to the extent that the issues identified by State law exist in the City's planning area. Additional elements that relate to the physical development of the city may also be addressed in the general plan. The degree of specificity and level of detail of the discussion of each general plan element need only reflect local conditions and circumstances. The *Lawndale General Plan* has been prepared consistent with the requirements of State law and addresses the relevant items addressed in Government Code Section 65300 et seq.

General Plan Objectives

The General Plan is more than just the legal basis for all local land use decisions; it is the vision for how the City will evolve, reflecting the community's objectives. The objectives of the *Lawndale General Plan* include:

- Reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders;
- Address issues and concerns identified by City residents, businesses, decision-makers, and other stakeholders;
- Protect Lawndale's existing residences, character, and sense of community;
- Proactively plan for and accommodate local and regional growth in a responsible manner;
- Encourage mixed-use development patterns along major corridors that promote vibrant commercial and residential areas;
- Allow for a range of high-quality housing options;
- Attract and retain businesses and industries that provide jobs for local residents;
- Continue to maintain and improve multimodal transportation opportunities;
- Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
- Address new requirements of State law; and
- Address emerging transportation, housing, and employment trends.

A general plan is:

Comprehensive

A general plan is comprehensive in nature, covering a wide range of topics such as land use, housing, economic development, infrastructure, public safety, recreation, and natural resources.

Long Range

A general plan provides guidance on achieving a long-range vision of the future for a city or county. To reach this envisioned future, the general plan includes goals, policies, and implementation programs that address both near-term and long-term needs. The City of Lawndale's General Plan looks ahead approximately 20 years—to the year of 2040. At the same time, the General Plan will provide policy direction that allows for flexibility to respond to changes in the marketplace and in technology, positioning the City for long-term success.

Consistent

A general plan must be internally ("horizontally") consistent, meaning it cannot contradict itself. A general plan uses a consistent set of assumptions and projections to assess future demands for housing, employment, public services, and infrastructure and must fully integrate its separate parts and relate them to each other without conflict. Additionally, all adopted portions (elements) of a general plan have equal weight. None may supersede another, so the general plan must resolve conflicts among the provisions of each element. Finally, all other plans, ordinances, and policies must be consistent with the general plan. This "vertical" consistency helps resolve conflicts between local specific plans, the City's Zoning Code, and the General Plan.

Scope and Content of the General Plan

General Plan Policy Document

The General Plan policy document contains the goals and policies that will guide future decisions within the City and identifies action items (implementation measures) to ensure the vision and goals of the General Plan are carried out. Two important documents support the General Plan: the Existing Conditions Report and the General Plan Environmental Impact Report (EIR). Both are intended to be used in conjunction with this General Plan and to serve as companions to this policy document. The Hawthorne Boulevard Specific Plan (HBSP) provides detailed policies, standards, and criteria for the corridor's development, consistent with the direction provided in the General Plan policy document and as analyzed in the General Plan EIR.

The *Lawndale General Plan* also contains a land use diagram (map), which serves as a general guide to the distribution of land uses throughout the City. The *Lawndale General Plan* addresses all of the elements required by State law, in addition to a range of optional topics and elements that the City has decided to include. The table below identifies the elements included in the *Lawndale General Plan* and the corresponding requirement in State law.

Relationship Between General Plan Elements and State Requirements

General Plan Elements		State Mandated								
		Land Use	Circulation	Conservation	Open Space	Noise	Safety	Housing	Environmental Justice	Optional Topics
Lawndale General Plan	Land Use	▲								
	Mobility		▲							
	Housing (Separate Cover)							▲		
	Resource Management			▲	▲					▲
	Public Safety					▲	▲			
	Environmental Justice								▲	
	Economic Development									▲
	Community Facilities									▲

Organization of the General Plan Elements

Each element (i.e., chapter) of the General Plan is organized into a set of goals, policies, and implementation actions. Each goal is supported by a particular set of policies and actions to implement and achieve that goal.

Planning Process

The last comprehensive update to the General Plan occurred in 1992. Since then, substantial changes to the planning context of the City have occurred, including shifts in the community's demographics and new ways of thinking about sustainability, public health, and placemaking. In light of these changes, the City undertook a comprehensive update of the General Plan (*Lawndale General Plan*) as an opportunity to reassess its long-term vision and identify new challenges, opportunities, and approaches to make that vision a reality. The update process began in 2020 and included the following steps.

Public Participation

The *Lawndale General Plan* was developed with community input and reflects the community's vision for Lawndale. A summary of the community outreach and public participation process is provided below.

Outreach Objectives

Objectives established for the comprehensive outreach program were to:

- Conduct an open and transparent process.
- Engage the full spectrum of Lawndale community members, residents, business owners, landowners, and other stakeholders in the General Plan Update process; enhance public awareness of the project and its importance.
- Gather meaningful community input, ideas, and feedback to shape the vision, alternatives, and policies to be included in the *Lawndale General Plan*.
- Build a framework to develop community consensus throughout the process.
- Strengthen and expand relationships and trust between the City and community members.

Lawndale General Plan Outreach

For all public workshops and meetings, the City of Lawndale conducted extensive bilingual outreach (English and Spanish), using a wide variety of methods and tools, to inform and encourage the community to participate in the update process. The following is a list of methods and tools used to inform the public of meetings, workshops, and the status of the work efforts.

- **General Plan Website**: A website devoted to informing the public about, and encouraging participation in, the update process has been maintained throughout the general plan update process. The website includes workshop materials, background information, and draft and final work products.
- **Focus Group Briefings**: The City held briefings with interested focus groups including representatives from the development community and community health and wellness stakeholders.
- **E-mail distribution list**: The list was developed and maintained over time, and included email contacts for agencies, organizations, stakeholders, and individuals.

Visioning Workshops

The City hosted eight workshops (February through December 2021), addressing a different topic of focus each month. Each workshop was conducted in a bilingual environment (English and Spanish) to minimize barriers to participation. Each workshop included a brief overview of the General Plan, including why it's important and why the City is updating its Plan, some background information on the evening's topic, and a series of facilitated activities to solicit input on key topics or ideas.

Workshop 1: Values, Issues, and Opportunities

The first General Plan Visioning Workshop was held virtually on February 2, 2021 (English) and March 9, 2021 (Spanish). The focus of this Visioning workshop was to introduce the General Plan and Hawthorne Boulevard Specific Plan Update, and ask for input from residents on what they value in Lawndale, what they see as challenges, and what their vision is for the future of the City. After a brief presentation on the General Plan and Hawthorne Boulevard Specific Plan Update, the City held a discussion and answered questions from the community.

During this workshop there was approximately 26 attendees for the English workshop and 3 Spanish speakers.

Workshop 2: Land Use

The second workshop was held virtually on March 23, 2021 (English) and April 26, 2021 (Spanish). The workshop included a presentation followed by a discussion with the community. During this workshop staff explained to what Land Use is and the types of Land Uses withing a community. Residential, Commercial, Institutional, Open Space and Industrial uses were described. During this workshop there was a public comment period where staff interacted with the community to obtain public opinions on the existing and desired land uses. There was approximately 16 attendees at this meeting's conclusion.

Workshop 3: Land Use and Transportation

The third workshop was held virtually on April 27, 2021 (English) and May 18, 2021 (Spanish). The focus of the last Workshop was on land use and transportation. As part of the overview presentation, the group considered the interface between transportation and land use planning in Lawndale. This meeting also recapped the desirable and undesirable land uses as proposed by the residents.

Workshop 4: General Plan and Land Use

The fourth workshop was held telephonically on May 17, 2021. This event gave the community an opportunity to call in and ask questions, as well as provide comments and suggestions on the General Plan and Hawthorne Boulevard Specific Plan Update. During this workshop there was no attendees.

Workshop 5: Virtual Community Workshop

The fifth workshop was held virtually on May 20, 2021. The workshop included a presentation followed by a discussion with the community. Staff discussed the Environmental Justice element and explained its importance. Staff also took some public comments. There were approximately 8 attendees at the meeting's conclusion.

Workshop 6: Virtual Community Workshop

The sixth workshop was held virtually on June 22, 2021. The workshop included a presentation that provided a recap on the General Plan Elements and Hawthorne Boulevard Specific Plan, followed by a discussion with the community. This workshop focused on obtaining public opinions on the future of the City.

Workshop 7: Virtual Community Workshop

The seventh workshop was held virtually on August 4, 2021. The focus of this workshop was the Housing Element and Fair Housing Act. The workshop included a presentation followed by a discussion with the

community. The Housing element was explained, residential sites inventory was presented. During the workshop staff discussed potential sites suitable for housing to accommodate all future housing from the Regional Housing Needs Assessment provided by California Department of Housing and Development.

Workshop 8: Interactive Community Workshop

The eighth workshop was held virtually on August 31, 2021. The workshop included a presentation followed by a discussion with the community. Staff prepared an in person workshop. There were several interactive activities including setting up desired density locations, choosing desired and undesired land uses, going over all elements and providing public comments. There were 7 attendees at this in person workshop.

Workshop 9: Virtual Community Workshop

The nineth workshop was held virtually on November 17, 2021. The workshop included a presentation followed by a discussion with the community. During this workshop staff presented the housing sites chosen for the housing element. Staff presented types of density and locations where they would be placed during the next RHNA cycle. Staff took notes on the public comments and responded to questions.

Workshop 10: Virtual Community Workshop

The tenth workshop was held virtually on December 15, 2021. The focus of this workshop was the Housing Element, including proposed sites. The workshop included a presentation followed by a discussion with the community. This was the final workshop, which was a whole recompilation review of the General Plan Update and what the intent of the workshops were.

Online Surveys and Polls

In order to capture as much input from the community as possible, including input from those who may not have participated in workshop community engagement opportunities, the project team designed two online surveys that were open to all and available throughout the outreach phase of the project. The surveys were administered online via the SurveyMonkey web platform and were available in English and Spanish. Survey #1 focused on visioning, values and living conditions in Lawndale as well as demographic questions. Survey #2 focused on community priorities and existing conditions related to housing. The City received a total of 99 responses to the surveys. The survey responses provide insight into the demographics and opinions of Lawndale community members concerning goals and topics related to the update of the City's General Plan.

Community Vision Statement

A Vision Statement is a collection of aspirational statements framing community needs and desires. Vision Statements are important to help guide the creation of the General Plan. The Lawndale Community Vision—illustrated on the following pages—was developed to reflect the meaningful community input received at the *Lawndale 2020 General Plan* workshops, online surveys, from key community members and stakeholders, and elected and appointed officials.

LAWNDALE Community Vision 2020

Lawndale is an energetic, small but highly urbanized place with a small-town feel characterized by its well-established neighborhoods and local businesses. Strategically-located within the central South Bay, Lawndale's exceptional climate and location provide exciting redevelopment opportunities that offer inviting spaces to live, work, learn, shop, and socialize. The City takes pride in collaborating with our residents, businesses, and local organizations to meet our long-term social and economic needs. Together, we promote a safe, healthy, vibrant, and diverse community that grows stronger every year.

WE ARE A TIGHT-KNIT COMMUNITY THAT CARES FOR ITS RESIDENTS

Lawndale celebrates its strong neighborhood connections and community culture, including its history, diversity, inclusivity, and family-friendly atmosphere. High-quality community services, facilities, and events create a lifestyle that residents value. Residents are represented by a responsive and effective local government that cultivates relationships with local organizations, the business community, and other local and regional partners to maintain our outstanding quality of life.

WE ARE A COMMUNITY WITH QUALITY HOUSING OPPORTUNITIES FOR ALL

Lawndale offers diverse housing options for persons of all incomes and lifestyles, including homeowners, renters, families, retirees, and young people. Established residential neighborhoods are quiet, well-maintained, and safe and make-up the backbone of our community. Mixed-use development that includes multifamily housing is focused along Hawthorne Boulevard.

WE HAVE A MIXED-USE ACTIVITY CENTER ALONG HAWTHORNE BLVD WHERE PEOPLE CAN

LIVE, WORK, SHOP, AND SOCIALIZE

Hawthorne Boulevard features a successful mix of businesses, residences, and amenities within an attractive, walkable environment. The active streetscape supports a variety of complementary uses that welcome enhanced pedestrian activity, social interactions, and window shopping. Characteristics of Hawthorne Boulevard include appropriately-scaled buildings, well-kept landscaping, safe pedestrian crossings, and distinctive sense of place.

WE ARE SUPPORTED BY A ROBUST, RESILIENT LOCAL ECONOMY

Lawndale provides for a diversity of businesses that support and are supported by the local community. Businesses cater to the daily needs of residents and attract visitors from outside the area. Lawndale's premier location and business-friendly environment is able to attract and retain high-quality employers that create good jobs and economic opportunities within the City. Lawndale maintains a robust, diverse, and resilient local economy that provides long-term fiscal sustainability.

WE CHOOSE

SUSTAINABLE DEVELOPMENT PATTERNS

THAT PROMOTE A HEALTHY AND ACTIVE COMMUNITY

Lawndale contributes to improved environmental quality and public health outcomes by promoting compact and sustainable infill development practices. Healthy community priorities are promoted through enhanced access to housing, jobs, and lifelong learning opportunities. Air quality is improved and greenhouse gas emissions are reduced through the promotion of green building techniques, multi-modal transportation options, and renewable and efficient energy sources. Our residents have increased access to public transportation and infrastructure improvements that promote walking, biking, and ride-sharing.

Applying the General Plan

The General Plan is intended for use by a broad range of persons, including City decision-makers, City staff, developers, and community members, to serve the following purposes:

- To identify land use patterns, growth, transportation, environmental, economic, and community goals and policies as they relate to land use, conservation, development, and provision of community services and facilities.
- To articulate a vision and strategy for the future development of Lawndale and its residents.
- To enable the City Council and Planning Commission to establish long-range land use, transportation, services, conservation, and growth goals and policies.
- To provide a basis for judging whether specific private development proposals and public projects are in harmony with these goals and policies.
- To inform citizens, developers, decision makers, and other jurisdictions of the policies that will guide development and resource conservation within Lawndale.

The General Plan applies to lands in the incorporated area of the City, to the extent allowed by Federal and State law. Under State law, many actions, such as development projects, specific plans, master plans, community plans, zoning, subdivisions, public agency projects, and other decisions must be consistent with the General Plan. State law requires that the City's ordinances regulating land use be consistent with the General Plan. The Zoning Code, individual project proposals, and other related plans and ordinances must be consistent with the goals and policies in the General Plan.

Key Terms

Goal: A description of the general desired condition that the community seeks to create.

Policy: A specific statement that guides decision-making as the City works to achieve the various goals. Once adopted, policies represent statements of City regulations.

Action: An action, procedure, implementation technique, or specific program to be undertaken by the City to help achieve a specified goal or implement an adopted policy.

Interpreting the General Plan

In reading the General Plan, one should infer that the goals, policies, and implementation measures are limited to the extent that it is financially feasible and appropriate for the City to carry them out and to the extent legally permitted by Federal and State law. For example, policies and measures which indicate that the City will “provide,” “support,” “ensure,” or otherwise require or carry them out do not indicate an irreversible commitment of City funds or staff resources to those activities, but rather, that the City will support them when the City deems that it is financially feasible and appropriate to do so. In some cases, the City will carry out various policies and measures by requiring development, infrastructure, and other projects to be consistent with the policies and actions of the General Plan. In other cases, the City may include General Plan items in the Capital Improvement Program, annual budget, or other implementation mechanisms, as the City deems appropriate.

How to Read Lawndale's General Plan

As the guide for future development and desired conditions, residents, property owners, and business owners should also familiarize themselves with how to read this document. Each element contains a brief introduction, several goals and related policies, and a description of related actions to help implement the City's vision.

Goals

A goal in the General Plan is the broadest statement of community values. It is a generalized ideal which provides a sense of direction for action. Goals are overall statements of desired future conditions.

Policies and Implementation Actions

The essence of the General Plan is contained within its policies. Policies are statements which further refine the goals, and guide the course of action the City must take to achieve the goals in the plan. It is important to note that policies are guides for decision makers, not decisions themselves. Policies and implementation measures must be clear to be useful. However, policies may range in terms of commitment of resources, importance, and expected results. Therefore, it is important for readers to understand the distinctions between various levels of policy and implementation action. The following is a list of common terms used in policies and implementation measures, and how to interpret its usage in the General Plan. In cases where other terms are used (and not defined below), an equivalent to the closest applicable term can be used.

Shall: Absolute commitment to the policy or action, and indicate that the policy must be adhered to in all cases.

Should: Policy will be followed in most cases, but exceptions are acceptable for good reasons.

Ensure: Policy indicates that the City plays a role in making sure something happens, often times in partnership with other agencies or as part of other City programs and processes.

Encourage: Policy is highly recommended and/or desired, and should be pursued when feasible.

Allow: Policy will be supported within certain parameters and certain guidelines.

Coordinate: Policy will occur in conjunction with another entity, and the City will carry its share of the responsibility.

Explore: Effort will be taken to investigate the subject at hand, to discover whether or not further commitment is relevant.

Consider: Policy may or may not be followed, depending upon the results of analysis that will be completed.

Limit: Effort will be taken to keep the subject within certain limits, or will at least make undesired change more difficult.

Restrict: Effort will be taken to keep the undesired action to a minimum.

Amending the General Plan

The General Plan is not static, but rather is a dynamic and multi-faceted document that defines and addresses the changing needs of the City. It is based on an on-going assessment and understanding of existing and projected community needs. The City's decision-makers have broad discretion in interpreting the General Plan and its purposes, and are allowed to weigh and balance the various goals and policies when applying them. Recognizing the need for the General Plan to remain current and reflective of local issues and policies, State law allows the City to periodically amend the General Plan to ensure that it is consistent with the conditions, values, expectations, and needs of its residents, businesses, and other stakeholders. The General Plan may be amended in accordance with State law. While specific findings may be applied on a project-by-project basis, at a minimum the following standard findings shall be made for each proposed General Plan amendment:

1. The amendment is deemed to be in the public interest;
2. The amendment is consistent and/or compatible with the rest of the General Plan;
3. The potential impacts of the amendment have been assessed and have been determined not to be detrimental to the public health, safety, or welfare; and
4. The amendment has been processed in accordance with the applicable provisions of the California Government Code, the California Environmental Quality Act (CEQA), and the City's Municipal Code.

City-initiated amendments, as well as amendments requested by other parties, are subject to the same basic process described above to ensure consistency and compatibility with the General Plan. This includes appropriate environmental review, public notice, and public hearings, leading to an official action by the City Council.

Timing

Under State law, mandatory elements of the General Plan may be amended up to four times in each calendar year. The City Council or any citizen may initiate consideration of a General Plan Amendment. State law further requires that the Housing Element be reviewed and updated at least once every eight years.

Exemptions

The State Legislature has recognized that occasions arise which require the local jurisdiction to have some flexibility in amending the General Plan. As set forth in the California Government Code, the following are exempt from the General Plan amendment schedule:

- Amendments to optional elements.
- Amendments requested and necessary for affordable housing (Section 65358(c)).
- Any amendment necessary to comply with a court decision in a case involving the legal adequacy of the general plan (Section 65358(d)(1)).
- Amendments to bring a general plan into compliance with an airport land use plan (Section 65302.3).

Annual Reporting

Given the long-term nature of the General Plan, it is critical to periodically evaluate its effectiveness and to document the implementation status of the various policies and actions that it contains. State law provides direction on how cities and counties can maintain the General Plan as a useful policy guide. State law also requires the City to annually report "the status of the plan and progress in its implementation" (California Government Code Section 65400(b)) to the City Council. The Action items in each Element identifies each measure to be carried out by the General Plan.

Introduction to Land Use

The Land Use Element is a guide to land use planning in Lawndale and provides a framework for the economic, environmental, and infrastructure issues examined in the other General Plan elements. The Land Use Element, which includes the Land Use Map (Figure LU-1), identifies how and where land will be used in the future—for housing, commercial and industrial uses, public facilities, parks, open space, and transportation. The Land Use Element identifies the range of allowed uses and development densities and intensities permitted by the Land Use Plan. Overall, this element is designed to:

- Preserve and protect the City's existing residential neighborhoods,
- Direct future growth to key opportunity areas along the City's primary transportation corridors,
- Support quality expanded housing and employment opportunities, and
- Promote a strong sense of place and identity in Lawndale.

Organization of Element

The Land Use Element goals and policies address each of the following topics as they relate to Lawndale:

- Land Use Mix
- Managed Growth
- Land Use Compatibility
- Community Character and Design

Overview

The Land Use Element provides for a development and resource conservation pattern that preserves and protects Lawndale's unique small-town character while promoting opportunities for expanded housing opportunities, economic development, and local job growth. Ensuring that Lawndale has sufficient capacity and flexibility to support a diverse mix of land uses is essential to the community's ability to thrive and be economically sustainable over time; the Economic Development Element provides important complementary policy direction to support the City's land use priorities.

State law requires the Land Use Element to address the following, to the extent they are locally relevant:

- Proposed general distribution, general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land;
- Population density and building intensity; and
- Areas subject to flooding (the Lawndale General Plan addresses this topic within the context of its Public Safety Element).

Background information regarding land use is presented in Chapter 2 of the General Plan Update Existing Conditions Report.

Planning Area Boundaries

City Limits

The *City Limits* include all area within the City's corporate boundary, over which the City exercises land use authority and provides public services.

Sphere Of Influence

A *Sphere of Influence* (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). A SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. Lawndale's SOI extends east of City Limits into the Los Angeles County unincorporated community of El Camino Village. El Camino Village is primarily a densely developed, single-family residential community with commercial uses along Crenshaw Boulevard. Although parts of El Camino Village share a Lawndale zip code, the City has historically not provided services to the community.

Planning Area

The *Planning Area* is the geographic area for which the General Plan provides a framework for long-term growth and resource conservation. State law requires the General Plan to include all territory within Lawndale's incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300). The Planning Area, as shown in Figure LU-2, includes the entire city limits (approximately 917 acres) as well as the City of Lawndale's SOI (approximately 229 acres); the entire Planning Area is approximately 1,146 acres.

Specific Plan Area

A city will often have neighborhoods or areas that are unique and/or important in ways that require special consideration. A specific plan is a major planning document that includes land use and development policies specific to an area. For Lawndale, the Hawthorne Boulevard Specific Plan (HBSP) regulates and guides the development of the Hawthorne Boulevard corridor and the north side of both Artesia Boulevard and Redondo Beach Boulevard. The HBSP acts as a tool for implementing the goals and policies of the General Plan through the regulation of use, density, height, and other design standards to achieve the overall vision for the area. The Specific Plan was originally adopted in June 1999 and has undergone various amendments since its adoption. A key action item of this Land Use Element is to update the HBSP to implement the goals and policies included in the City's updated General Plan.

The purpose of the HBSP is to help facilitate the successful redevelopment of the Specific Plan area into a thriving mixed-use activity center featuring high-quality multifamily housing choices, dynamic commercial options, and inviting public spaces. The Specific Plan is important to the City and its residents because it emphasizes economic growth along Hawthorne Boulevard and other significant transportation corridors, and accounts for the unique conditions along these corridors when providing detailed development guidance.

The boundaries of the HBSP are depicted on Figure LU-3.

Land Use Designations

The Land Use Designations in this General Plan specify the type of allowed uses associated with each designation. Zoning, specific plans, and individual development projects must be consistent with the intensities allowed under the General Plan.

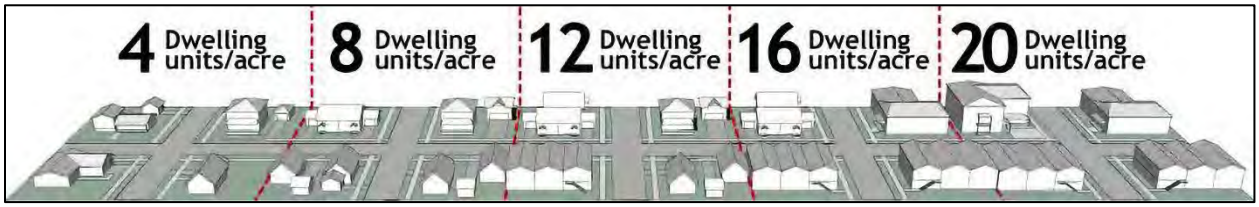
Land Use Classification System

The Land Use Map (Figure LU-1) illustrates the various types and distribution of land uses planned for the community. The land use classification system includes nine land use designations. Land use designations identify the types and nature of development allowed in particular locations depicted on the Land Use Map (Figure LU-1).

The residential category includes three land use designations and an overlay designation that allow for a range of housing types and densities. The nonresidential grouping includes a variety of jobs-generating designations (Commercial and Industrial) as well as designations that serve the public good, including Public Facilities and Open Space. Finally, the Hawthorne Boulevard Specific Plan designation indicates that the Hawthorne Boulevard Specific Plan guides future land use and zoning decisions for that area of the City.

Density

Density refers to the intensity of residential uses in terms of a range, from a minimum to a maximum, of dwelling units per gross acre. Various building configurations representing different densities are shown below.



Buildout Potential

State General Plan law requires that the Land Use Element indicate the maximum densities and intensities permitted within the Land Use Plan. The land use designations shown on the Land Use Map are described in detail in this Element. Table LU-1 lists each of the land use designations shown on the Land Use Map and provides a corresponding indication of maximum density or intensity of allowable development. Maximum allowable development on individual parcels of land is governed by these measures of density or intensity. The table also includes the effective overall level of development within each land use designation within the City. These effective levels of development represent an anticipated overall density and intensity of development for Lawndale and are, therefore, less than the absolute maximum allowed for an individual parcel of land. For various reasons, many parcels in the community have not been developed to maximum density or intensity and, in the future, maximum development as described in this Element can be expected to occur only on a limited number of parcels. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

The overall future development in Lawndale is anticipated to occur at the expected level of density or intensity indicated in Table LU-1. Development at an intensity or density between the expected and maximum levels is desired when projects offer exceptional design quality, important public amenities or benefits, or other factors that promote important goals and policies of the General Plan. For the residential land use designations, projects are expected to build to a density at least as high as the lowest density allowed by the respective designation.

Residential Land Use Designations

Low Density Residential (LDR); 0 – 8.9 du/ac

The Low Density Residential land use designation provides for the development of single-family dwellings. This designation allows a density of 0–8.9 du/ac.

Medium Density Residential (MDR); 9.0 – 17.4 du/ac

The Medium Density Residential land use designation allows for a range of housing types including single-family detached and attached units and duplexes, condominiums, and townhouses. This designation allows a density of 9.0–17.4 du/ac.

High Density Residential (HDR); 17.5 – 33 du/ac

The High Density Residential land use designation provides for a variety of small-lot single-family dwelling units and multi-family dwelling units including: courtyard homes, patio homes, duplex, condominiums, townhouses, apartments, and manufactured homes. This designation allows a density of 17.5–33 du/ac.

Housing Opportunity Overlay (HOO); 20.0 – 100 du/ac

The Housing Opportunity Overlay, which applies to select sites outside of the Hawthorne Boulevard Specific Plan, provides opportunity for the development of high density housing in single-use and mixed-use formats at a density of 20.0–100.0 du/ac. New residential development at HOO sites, including residential development as part of a mixed-use project, must meet a minimum residential density of at least 20.0 du/ac, regardless of the underlying land use designation. For new nonresidential development, all standards related to the underlying land use designation shall continue to apply.

Non-Residential Land Use Designations

Commercial (C)

The Commercial land use designation provides for a variety of retail and service-oriented business activities, restaurants, services and office uses to meet the daily needs of residents. There is no minimum or maximum building intensity.

Industrial (I)

The Industrial designation permits light manufacturing, assembly, packaging, fabrication and processing of materials into finishing products rather than the conversion of raw materials. The industrial activity shall be conducted primarily within structures and outside storage areas and assembly activity should be limited. There is no minimum or maximum building intensity.

Open Space (OS)

The Open Space designation includes public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas.

Public Facilities (PF)

The Public Facilities designation provides for publicly owned properties and facilities including, schools, fire stations, police stations, community centers, utility substations, water facilities, administrative offices and City government office complexes. Other uses that are determined to be compatible with primary uses may also be allowed. There is no minimum or maximum building intensity.

Hawthorne Boulevard Specific Plan

Hawthorne Boulevard Specific Plan (HBSP); Densities and Intensities Vary

The Hawthorne Boulevard Specific Plan designation provides detailed policies, standards, and criteria for the area's development. Land uses within the Specific Plan area are detailed in the Specific Plan document. The Specific Plan serves as the land use and zoning map for the Specific Plan area. Any future amendments to the land uses identified in the Specific Plan will not require a revision to the General Plan (General Plan Amendment).

Table LU-1 General Plan Land Use 2045 Potential Buildout Summary

Land Use Designation	Acres[1]	Allowed Density and/or Building Intensity	Assumed Density and/or Building Intensity[2]	Units	Population	Non-Residential Square Feet	Jobs
Residential Land Uses							
Low Density Residential	49	0-8.9 du/ac	8.5 du/ac	420	1,537	-	-
Medium Density Residential	460	9-17.4 du/ac	12 du/ac	5,534	18,404	-	-
High Density Residential	115	17.5-33 du/ac	30 du/ac	3,464	9,418	-	-
Housing Opportunity Overlay[3]		20-100 du/ac	50 du/ac			-	-
Residential Subtotal		-	-			-	-
Non-Residential Land Uses							
Commercial	38	No max	0.5	311	706	4,904,877	1,673
Industrial	21	No max	0.5	-	-	459,130	612
Public Facilities	172	No max	0.15	-	-	1,124,243	1,124
Open Space	14	-	-	27	62	-	-
Non-Residential Subtotal		-	-				
Specific Plan Land Uses							
Hawthorne Boulevard Specific Plan Area[4]	95	Varies	24-75 du/ac and 0.6	3,931	11,017	2,484,823	4,970
Specific Plan Subtotal	*95*	-	-	3,931	11,017	2,484,823	4,970
Totals	**1,195**	**-**	**-**	15,405	47,430	5,351,026	9,208

1. Acres are given as adjusted gross acreages, which do not include the right-of-way for major roadways, flood control facilities, or railroads.
2. Density/building intensity includes both residential density, expressed as dwelling units per acre, and nonresidential intensity, expressed as floor area ratio (FAR), which is the amount of building square feet in relation to the size of the lot. While no minimum or maximum building intensities apply to land uses within Lawndale, an assumed building intensity) is used in Table LU-1 to establish potential buildout totals. Historically, citywide buildout levels do not achieve the maximum allowable density/intensity on every parcel, and are, on average, lower than allowed by the General Plan. Accordingly, the projections in this General Plan do not assume buildout at the maximum density or intensity but are adjusted downward to account for variations in development.
3. Acreage and the development potential of the Housing Opportunity Overlay is not included in the total acreage; figures associated with development of these areas are included within the underlying base designations. The assumed density for all sites designated with the HOO is 50 du/ac, regardless of the underlying base designation.
4. Parcels within the Hawthorne Boulevard Specific Plan that are identified in the City's 2021-2029 Housing Element as Housing Overlay 150 sites shall have a maximum density of 150 du/ac. The buildout estimate for the Hawthorne Boulevard Specific Plan uses an assumed density of 75 du/ac for sites in the Specific Plan area identified in the City's Housing Sites Inventory. All other sites where residential uses are allowed have an assumed density of 24 du/ac.

GOAL LU-1 LAND USE MIX

A community with a fiscally sustainable mix of land uses that meets the diverse needs of Lawndale residents, offers a variety of housing, employment opportunities, and supports the provision of public services.

Every community requires a mixture of land uses: residential land to provide housing; commercial and industrial land to provide goods and services, tax revenue, employment opportunities; public and institutional land to provide public services and infrastructure; and parks and open space for the enjoyment of all. A desirable community provides a balance of land uses that responds to and anticipates its residents' current and future needs.

LU-1 Policies

LU-1.1 **Sustainable Land Use Pattern**. Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

LU-1.2 **Balance Jobs and Housing**. Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

LU-1.3 **Diversity of Residential Options**. Strive to maintain a reasonable balance between rental and ownership housing opportunities across all residential types, including single family detached homes and senior housing, by maintaining a range of allowable land use densities.

LU-1.4 **Commercial Corridors**. Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

LU-1.5 **Public Services for Quality of Life**. Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

LU-1.6 **Uses to Meet Daily Needs**. Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

LU-1.7 **Public Gathering Spaces**. Support the provision of attractive outdoor public gathering places such as plazas, green space, and squares to strengthen social engagement and provide visual relief throughout the City.

LU-1 Actions

LU-1a Create consistency between the City's Zoning Code and Zoning Map and General Plan.

LU-1b Update the Hawthorne Boulevard Specific Plan as appropriate to ensure consistency with this Land Use Element, designations shown on Figure LU-1, and the City's adopted 2021-2029 Housing Element.

LU-1c Review the Zoning Code and update as appropriate to reflect Land Use goals, policies, and implementation actions included in this Plan.

LU-1d As part of development review process, ensure that developments fall within the minimum and maximum density requirements stipulated on the Land Use Map and included within the Land Use Descriptions. Projects shall also be reviewed for consistency with the development standards and density requirements established by any applicable Specific Plan governing the area in question.

LU-1e Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

GOAL LU-2 MANAGED GROWTH

A City that manages and directs growth to strategic locations so that the community and its neighborhoods are protected and enhanced.

Population growth in Lawndale and the Los Angeles metropolitan region is expected to continue, accompanied by a variety of new development that has the potential to impact community character. While recognizing that change is inevitable, the community can strategically plan and guide future development to specific locations most suitable for redevelopment to support the provision of new residential and employment opportunities, while protecting and enhancing the existing character of Lawndale and its neighborhoods.

LU-2 Policies

LU-2.1 **Existing Land Use Pattern**. Strive to maintain the basic pattern of existing land uses, preserving residential neighborhoods, while providing for enhancement of mixed-use corridors to accommodate desirable redevelopment plans and improve economic sustainability.

LU-2.2 **Focused Areas for New Development**. Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

LU-2.3 **Hawthorne Boulevard Specific Plan**. Facilitate the redevelopment of Hawthorne Boulevard through implementation of the Hawthorne Boulevard Specific Plan which encourages a mixture of quality multi-family housing development, local- and destination-type commercial uses, eateries, and civic uses such as cultural and performing art facilities in innovative development formats.

LU-2.4 **Developable Parcels**. Encourage the consolidation of small lots into larger developable parcels (at least 0.50 acres), particularly in the Hawthorne Boulevard Specific Plan area, to create new opportunities for financially viable development that supports the City's desired land use mix.

LU-2.5 **Homeownership Opportunities**. Encourage the development of for-sale housing to expand local homeownership opportunities.

LU-2.6 **Regional Growth**. Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

LU-2.7 **Unincorporated Areas**. Respect the history of the unincorporated neighborhoods in Lawndale's planning area and continue to provide land use direction for those areas in accordance with applicable local, regional, and State regulations.

LU-2 Actions

LU-2a Prepare a General Plan Status Report annually as required by California Government Code. This includes reviewing the General Plan Land Use planning objectives and General Plan Land Use Map to ensure they continue to support the community's long-term land use vision and amend the text and map as necessary to maintain a modern land use planning perspective.

LU-2b Conduct outreach to commercial center owners to discuss strategies, benefits, and opportunities for lot consolidation, parcel assemblage, and parking/reciprocal access agreements.

LU-2c Evaluate the feasibility of providing administrative incentives, such as expedited processing, for lot consolidations, especially in the Hawthorne Boulevard Specific Plan area and Housing Opportunity Overlay sites.

LU-2d Investigate possible incentives for new pedestrian-friendly anchor development at important road intersections to attract retail clientele and increase foot traffic.

LU-2e Implement the Hawthorne Boulevard Specific Plan to guide future development in this area. This includes reviewing and revising the implementation strategies identified in the Specific Plan as part of the Specific Plan's comprehensive update, and prioritizing the most critical actions for funding and staff resources.

GOAL LU-3 LAND USE COMPATIBILITY

A community where new development is sensitively integrated with existing development, including residential neighborhoods, and minimizes impacts on surrounding land uses.

Lawndale is primarily a residential community and will continue to have a substantial portion of its land devoted to housing. While the City requires a comprehensive circulation system and revenue generated by commercial, office, and industrial uses to support the needs of the community, these roadways and non-residential land uses must be compatible with the existing community and neighborhoods.

LU-3 Policies

LU-3.1 **Surrounding Uses**. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

LU-3.2 **Use Configuration**. Permit a mixture of compatible land uses on a single site or within a single development project in a vertical or horizontal configuration.

LU-3.3 **Code Compliance**. Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

LU-3.4 **Residential Uses**. Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including transportation facilities.

LU-3.5 **Scale and Massing**. Require that the scale and massing of new development provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjacent lower density neighborhoods.

LU-3.6 **Mixed-Use Design Integration.** Require that residential and nonresidential portions of mixed-use buildings and sites be integrated through site and building design to ensure compatibility among uses.

LU-3.7 **Development Buffers**. Require new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control.

LU-3.8 **Telecommunications Facilities**. To the extent legally possible, regulate and ensure that telecommunications facilities such as cell towers, radio towers, and other appurtenances do not block, impede, or impair the visual quality of Lawndale.

LU-3.9 **Interagency Cooperation**. Establish and maintain an ongoing liaison with Caltrans, LA Metro, utility companies, adjacent cities, and other major government and private agencies to help minimize the traffic, noise, and visual impacts of their facilities and operations.

LU-3 Actions

LU-3a Prepare and adopt Objective Design Standards applicable to all new multi-family residential and mixed-use development.

LU-3b Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

LU-3c Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

LU-3d Review the Zoning Code, and amend it, if necessary, to create standards addressing appropriate treatments to buffer nonresidential uses from residential and other sensitive uses.

LU-3e Analyze land use compatibility through the development review process to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.

LU-3f Work with Southern California Edison (SCE) to improve compatibility of its facilities with other development and scenic resources. On an ongoing basis and through the development review process, the City shall:

- Request SCE improve transmission line corridors with attractive ornamental plantings, landscape screening, and trails.
- Require new development to underground all utility lines needed to serve the development.

GOAL LU-4 COMMUNITY CHARACTER AND DESIGN

A visually attractive community that helps create a unique sense of place.

As a built-out, primarily residential community, Lawndale respects existing neighborhoods that comprise the community character. It is important that new development and redevelopment activities be planned and designed in a manner that enhances the community's identity and quality of life. Comprehensive policies, standards, and guidelines that encourage thoughtful community design and foster a sense of place should be implemented.

LU-4 Policies

LU-4.1 **Local Identity**. Enhance Lawndale's local identity, distinct from its South Bay neighbors, through implementation of attractive high-quality gateways, city entry signs and design features, cohesive street signs, and other design features at public gathering spaces and other areas.

LU-4.2 **Standards and Guidelines**. Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic.

LU-4.3 **Site Planning**. Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

LU-4.4 **Pedestrian-Scale Amenities**. Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

LU-4.5 **Gathering Places**. Encourage the integration of on-site plazas or gathering spaces in new multi-family and mixed-use developments, and explore ways to creatively integrate outdoor dining, seating, or other activity-generating features into project design.

LU-4.6 **Older Neighborhoods and Businesses**. Develop or participate in programs to rehabilitate older residential neighborhoods and commercial centers to prevent blight and maintain the quality of the built environment.

LU-4.7 **Landscaping**. Encourage, to the maximum extent feasible, project and streetscape landscaping be designed to include drought tolerant, native California plant species and the use of a drip, micro-spray or other low-flow irrigation systems.

LU-4.8 **Arts in Public Places**. Promote art in public places to provide a diverse and culturally rich environment for Lawndale's residents and visitors.

LU-4.9 **Undergrounding of Utilities**. Encourage and assist, where possible, with the undergrounding of utility lines consistent with City regulations established in the Municipal Code.

LU-4 Actions

LU-4a Create a master streetscape plan addressing landscaping, signage, lighting, gateway design, and special design features along enhanced corridors and at key entryways to the City. The plan should identify selected features and amenities that will create separate identities in different parts of the City.

LU-4b Meet with Caltrans to stay informed regarding ongoing freeway improvements and to develop a strategy to create enhanced landscaping at the City's interchanges.

LU-4c Create a process to consider community-generated requests in the formulation of the annual Capital Improvement Program budgeting process.

LU-4d Research and evaluate the possibility of creating a façade improvement program to encourage property owners to improve upon and reinvest in their businesses.

LU-4e Continue to implement the City's existing development standards, or create new standards if appropriate, to regulate new construction and revisions to existing buildings. New standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill developments.

LU-4f Seek grant funding ("greening" grants) to help offset the cost of landscape improvements along community corridors, with a focus on Hawthorne Boulevard.

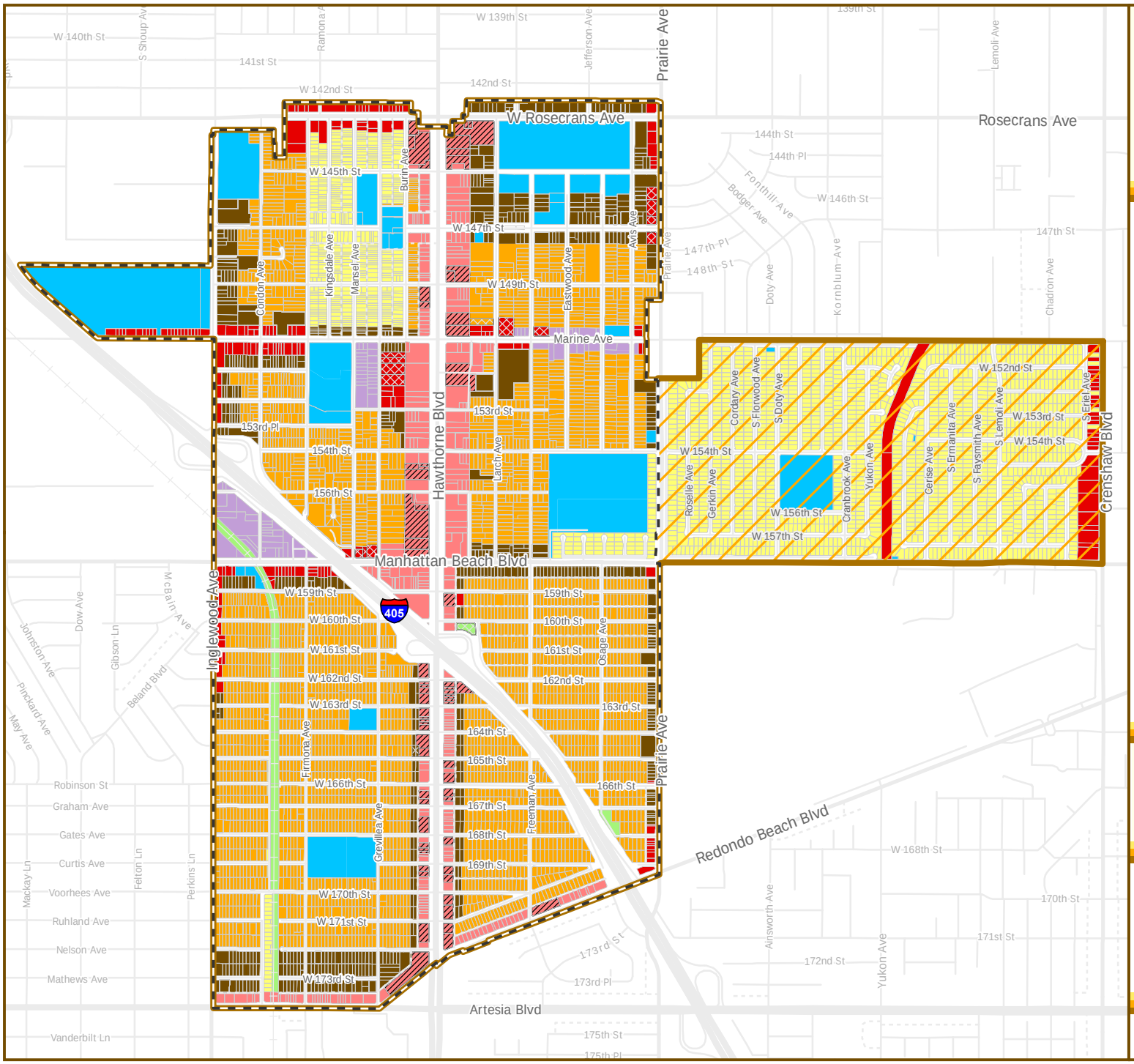
LU-4g Work with local nurseries to make tress more easily available.

LU-4h Continue to implement the City's Art in Public Spaces ordinance, collect impact fees, and install art as appropriate.

LU-4i Work with SCE to coordinate the undergrounding of new utilities with the undergrounding of existing utilities whenever financially and physically feasible.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure LU-1. Land Use Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Assessor Parcel Boundary
- Housing Overlay
- Housing Overlay
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- HBSP
- Industrial
- Open Space
- Public Facilities

0 500 1,000
Feet

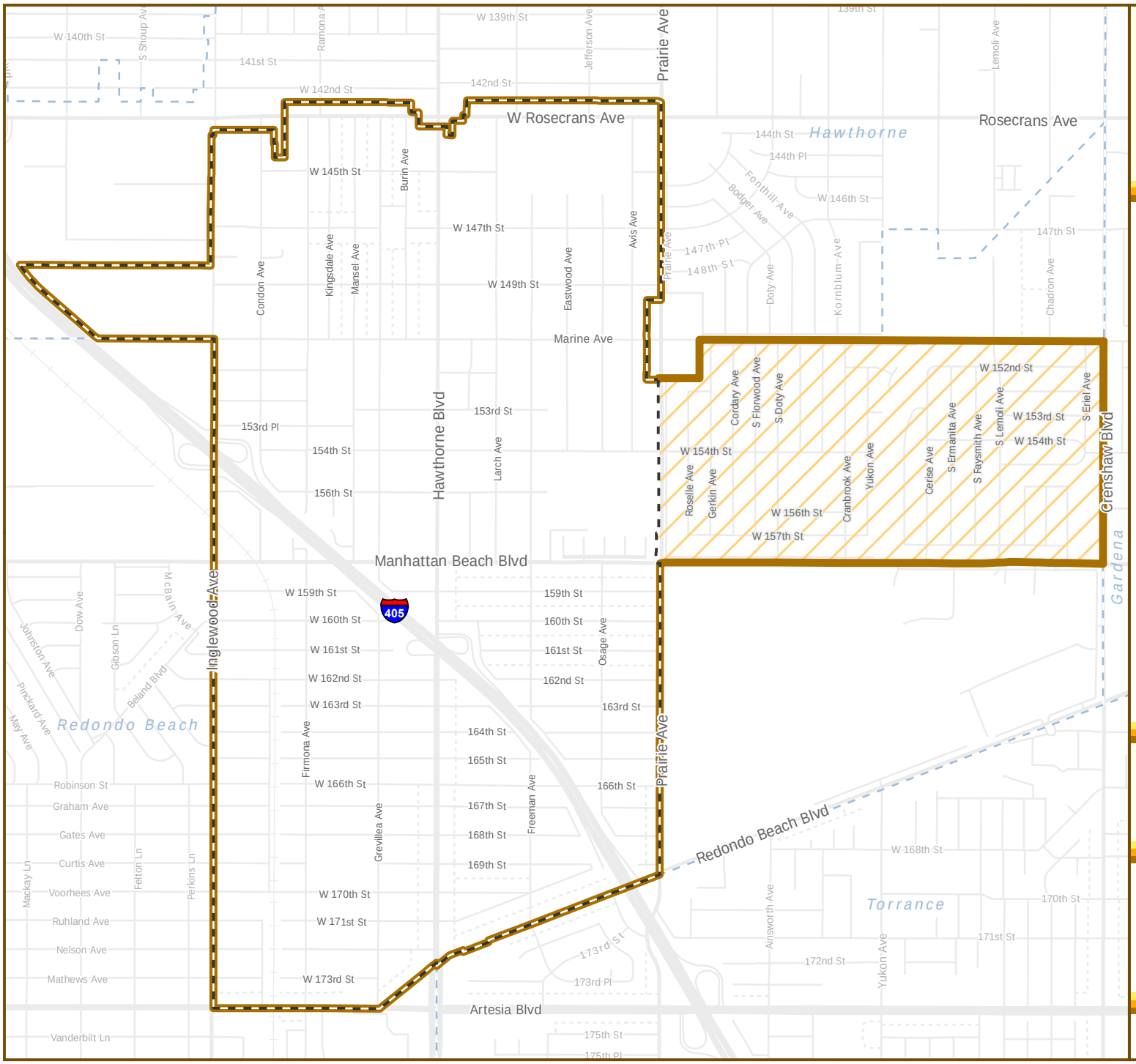
Sources: City of Lawndale; Los Angeles County.
Date: November 18, 2022.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure LU-2. Planning Area

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Inorporated Area

0 500 1,000
Feet

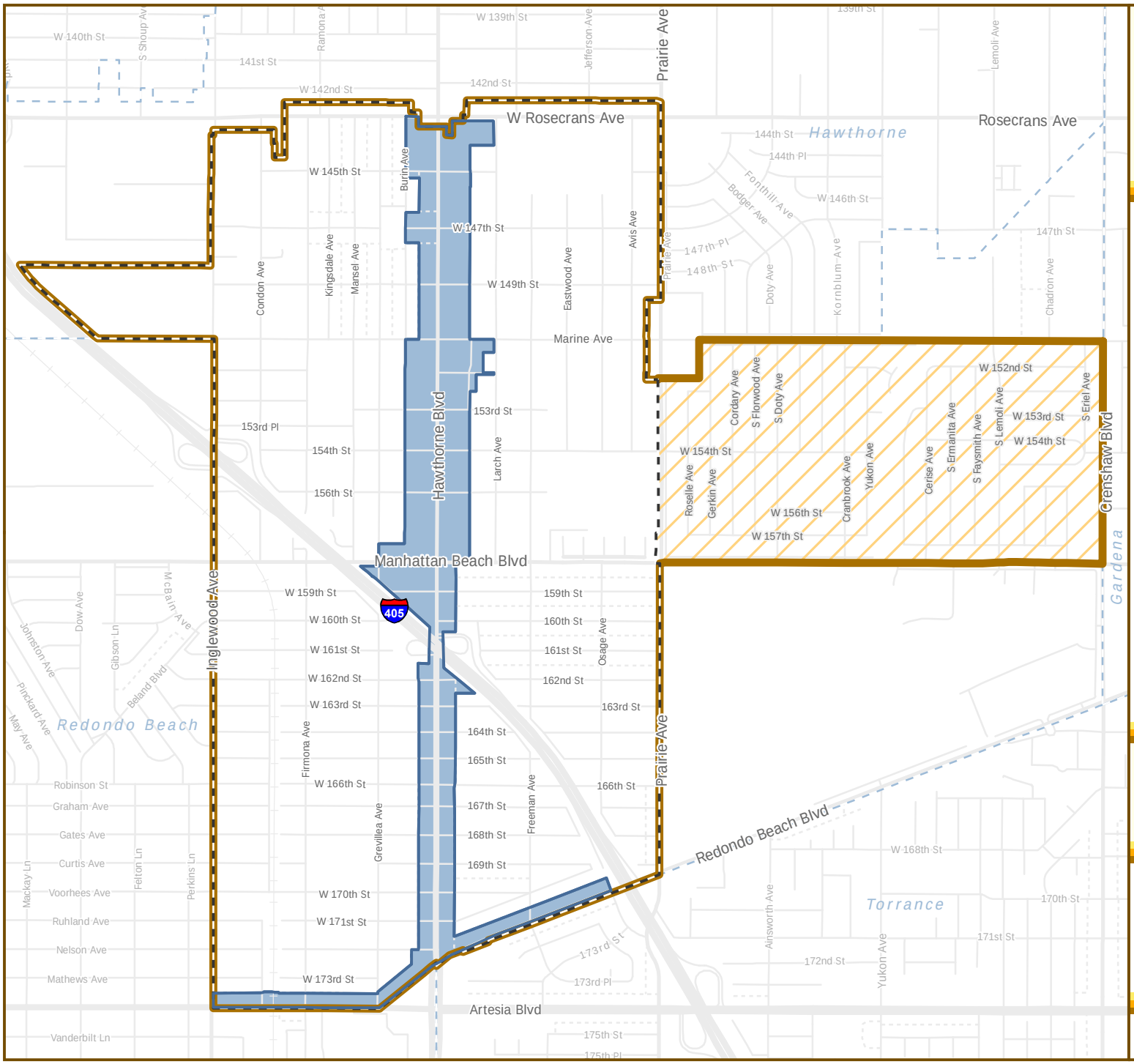
Sources: City of Lawndale; Los Angeles County.
Date: November 18, 2022.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure LU-3. Hawthorne Boulevard Specific Plan Map

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated
- Hawthorn Boulevard Specific Plan Boundary

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 20, 2023.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

Introduction to Mobility

The City of Lawndale consists of approximately 65 miles of roadway. With only 1.97 square miles, the City is bordered by Redondo Beach, Hawthorne, Torrance and the unincorporated area of El Camino Village LA County, all connected by a vast network of roadways. The Mobility Element provides the framework for decisions concerning the City's multimodal transportation system, which includes all users of streets, roads and highways, including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and parking, plus goods movement and parking. The Mobility Element provides for coordination with the Los Angeles County Metropolitan Transportation Authority (Metro), which serves as the coordinating agency for transportation funding for Los Angeles County.

State law (California Government Code Section 65302(b)) mandates that the Mobility Element contain the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and ports, and other public utilities and facilities, to the extent these items exist in the planning area.

The Mobility Element reflects the City's desire to provide complete street, bicycle, and pedestrian facilities to serve residents, employees and visitors to the City. The City's transportation infrastructure is included as a main component for mobility, and is impacted by growing developments, population, business, recreational activities, and more. This element will incorporate policies and actions that will maintain and/or improve safety, walkability and connectivity within and through the City, accommodating these expectations for economic growth.

Organization of Element

The Mobility Element will address each of the topics below as they relate to the City of Lawndale. The goals and policies of this element are organized around the following topics:

- Local Circulation System
- Regional Circulation
- Complete Streets
- Parking
- Transit
- Active Transportation
- Goods Movement
- Funding
- Transportation Management

GOAL M-1 LOCAL CIRCULATION SYSTEM

A community served by a safe circulation system with adequate traffic flow on arterial roadways and minimized adverse traffic effects on residential neighborhoods.

The circulation system includes a hierarchy of roadways, railways, and off-street paths and trails that serve mobility and local access needs for those who live in, work in, or visit the City. The circulation system allows individuals to travel safely and conveniently to, from, and through the City by vehicle, transit, bicycles, foot, and other methods. Figure M-1 depicts the City of Lawndale's Local Transportation network and presents the roadway Functional Classifications. These are defined by the vehicle volume and number of vehicular lanes provided, and may include other features such as raised medians, center turn lanes, on-street parking, and bike lanes; the City's roadway Functional Classifications are defined as follows:

- ***Major Arterials*** serve as high-capacity inter-city thoroughfares, and generally carry the majority of traffic traveling through the City, and provide regional travel and access to freeways. Their primary function is to move vehicles. Major Arterials are designed to carry high traffic volumes at higher speeds. Major Arterials serve to collect traffic entering or exiting the 405 Freeway. They consist of four to eight travel lanes (two to four in each direction) and a raised or painted median with a center turn lane. Typical posted speeds may range from 35 to 45 miles per hour.
- ***Collectors*** are intended to carry low to moderate capacity traffic between the arterial street network and local streets. They serve commercial, residential, or public uses, and consist of two travel lanes (one in each direction) and are undivided (with or without centerline striping). Typical posted speeds may range from 25 to 35 miles per hour.
- ***Local Streets*** provide intra-city direct access and parking to adjacent land uses. Local Streets are not intended to serve through-traffic. They typically consist of two travel lanes (one in each direction) and are undivided (with or without centerline striping). Typical posted speeds are 25 miles per hour.

M-1 Policies

M-1.1 **Arterial Roadway Network**. Implement the roadway network based on the classifications mapped in Figure M-1. Implementation will require a plan to accommodate existing and future needs due to land use growth and shifts in travel patterns.

M-1.2 **Vehicle Level of Service (LOS).** Maintain vehicular LOS "D" along major City intersections (two major arterials intersecting) whenever possible. Certain intersections may be exempt from the LOS "D" target as determined on a case-by-case basis determined by right-of-way constraints, community goals and complete street objectives.

M-1.3 **Traffic System Management.** Facilitate the efficient movement of vehicles and minimize delay utilizing existing roadway facilities.

M-1.4 **Rail Crossings Traffic Operations.** Collaborate with Metro and the California Public Utilities Commission (CPUC) to provide adequate intersection operations at at-grade crossing locations to minimize delays and con gestion and to create safe crossings for all users.

M-1.5 **Development-Related Traffic Impacts.** Impose conditions on new development to provide appropriate and feasible improvements to enhance and/or prevent the impediment to traffic flow, parking, ADA accessibility and roadway operations.

M-1.6 **Effects of New Technologies on Traffic Flow**. Maximize technologies and services such as ride-hailing, autonomous vehicles, electric bicycles, scooters, and other mobility devices, without adversely affecting the City's transportation network, such as added traffic on roads and sidewalks.

M-1.7 **Traffic Calming on Local Streets.** Encourage traffic calming strategies, such as diverters, median islands, and speed humps, and incorporation of traffic calming design in residential and school areas to slow traffic and promote safety, while not reducing parking supply.

M-1 Actions

M-1a Periodically review and assess the vehicular level of service along City facilities to determine, what, if any, improvements are warranted to maintain a safe and efficient flow of traffic throughout the City of Lawndale. Based on a thorough review of facility operations and funding availability, improvements should be included in the City's Capital Improvement Plan and/or required as part of project approval through the development review process.

M-1b Continue to update and implement projects in the City's Capital Improvement Plan to maintain and repair roadways; construct and improve roadways to build out the roadway network to ensure adequate levels of service.

M-1c As part of the development review process, require new developments to conduct traffic impact studies and construct, as a condition of approval, all feasible roadway and intersection improvements warranted by the new development. These studies shall be reviewed by the City Engineer or his designated representative. For development that will increase the traffic demand along SR 107 (Hawthorne Boulevard), SR 91 (Artesia Boulevard), and I-405 (San Diego Freeway), traffic studies shall be submitted to Cal trans District 7 for approval.

M-1d Monitor the development of new mobility technologies and the potential local effects on vehicular, bicycle, pedestrian and transit facilities and operations and seek funding to invest in associated infrastructure and technologies such as Traffic System Management (TSM) and traffic signal synchronization.

M-1e Monitor cut-through traffic on local streets, especially along residential areas and schools, and where appropriate evaluate the applicability of traffic calming tools and implement improvements as necessary.

GOAL M-2 REGIONAL CIRCULATION

A City that facilities the movement of people, services and goods between neighboring jurisdictions and agencies to promote consistent and efficient regional circulation.

The circulation system includes a comprehensive network of roadways that provide regional connections for people and for goods movement. Because these regionally significant connections serve transportation needs for people across the County and beyond, these facilities need to be planned and maintained in coordination with other agencies.

M-2 Policies

M-2.1 **Freeway Interchanges**. Coordinate with Caltrans to develop appropriate configurations and operations at Interstate 405 interchange intersections to minimize congestion on City streets and create safe conditions.

M-2.2 **Agency Coordination**. Coordinate with neighboring cities, telecom companies, and regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.

M-2.3 **Facility Connections.** Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to relate to those in neighboring jurisdictions.

M-2.4 **Local Facility Utilization.** Discourage pass-through traffic on City streets and the use of City streets by those users not doing business in the City.

M-2 Actions

M-2a Participate in regional planning forums to ensure that the City's concerns are considered at the regional level.

M-2b Advocate for the completion of planned regional transportation projects that would improve traffic conditions on City streets.

M-2c Monitor land use, circulation planning, and the development review process of neighboring jurisdictions, so that the City has an opportunity to recommend that impacts to Lawndale are considered by those jurisdictions.

GOAL M-3 COMPLETE STREETS

A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users.

Complete streets are streets that are designed to provide safe travel for everyone – people driving, riding transit, walking, biking, or using any other means of travel. Planning for and designing complete streets starts with policies that promote consideration for all users within all facility types.

M-3 Policies

M-3.1 **Complete Streets for Roadway Projects**. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

M-3.2 **Multimodal Connectivity**. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

M-3.3 **Streetscape Improvements**. Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

M-3.4 **Traffic Calming on Residential Streets.** Encourage traffic calming strategies and incorporation of traffic calming design in residential areas to slow traffic and promote safety.

M-3.5 **ADA Accessibility**. Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

M-3.6 **Safe Routes to School**. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

M-3 Actions

M-3a When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

M-3b Periodically review and update the City's standard street plans to ensure that the plans reflect the City's goals and policies for the circulation system.

M-3c Partner with Lawndale school administrators to improve traffic and parking conditions in school areas, especially during school drop off and pick-up periods.

M-3d Develop strategies and guidelines to set curb use priorities that consider the needs of through traffic, transit stops, bus turnouts, passenger drop-off/pick-up, deliveries, and short-term/long-term parking, especially along major corridors and in the Hawthorne Boulevard Specific Plan Area.

M-3e Include ADA-accessible facilities as part of roadway infrastructure projects.

GOAL M-4 PARKING

A community with an adequate parking supply to support business vibrancy and a high quality of life and regulations to support safe and convenient parking for residents and businesses.

Adequate off- and on-street parking is necessary to accommodate people who rely upon vehicles to travel to homes, businesses, recreation, and other uses. Effectively planning for and managing both public and private parking supply provides a balance between meeting demand and efficiently using space.

M-4 Policies

M-4.1 **New Development Parking Supply**. Ensure new residential and non-residential developments provide adequate parking supply to meet demand and reduce spillover to surrounding areas.

M-4.2 **Effects of New Technologies on Parking Demand**. Monitor the development of mobility new technologies and the potential effects on parking demand.

M-4.3 **Parking Demand and Supply Trends**. Monitor trends in the region pertaining to reduced parking demand for transit-oriented developments, mixed-use developments, and other high activity areas and the allocation of parking for shared vehicles, alternative energy vehicles, bicycles, and other modes of transportation.

M-4 Actions

M-4a Maintain and enforce City parking regulations as set in the Municipal Code.

M-4b Periodically review the City's parking code to address new types and patterns of development and new technologies which may have an impact on parking supply and/or demand in the City.

M-4c Maintain and manage the parking supply to ensure efficient and safe utilization through the employment of parking management strategies, such as shared parking in mixed-use areas and preferential parking districts in residential areas.

M-4d Review the feasibility of the development of a parking management plan to ensure developments within the Hawthorne Boulevard Specific Plan provide adequate parking supply to meet demand in the area. The plan may include flexible parking principles, such as shared parking, and may consider timing and pricing strategies, and adding supply with the development of parking structures.

GOAL M-5 TRANSIT

A community with a comprehensive public transportation system.

Transit is part of a comprehensive transportation network. It is a critical mode of transportation for those who cannot drive or do not have access to a vehicle, and also supplements other modes such as bicycle and pedestrian travel.

M-5 Policies

M-5.1 **Transit Use**. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

M-5.2 **Improve Local Public Transit Service**. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

M-5.3 **Transit Facilities**. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

M-5.4 **C (Green) Line Service**. Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

M-5.5 **C (Green) Line Stations**. Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

M-5.6 **Effects of New Technologies on Transit Use**. Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

M-5 Actions

M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

M-5b Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

GOAL M-6 ACTIVE TRANSPORTATION

A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

A network of supportive infrastructure can encourage travel by non-motorized transportation. The City has existing pedestrian and bicycle paths that support active transportation. Connecting gaps and providing supportive infrastructure benefits users and promotes these travel modes.

M-6 Policies

M-6.1 **Bicycle Master Plan**. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

M-6.2 **Local Travel Network**. Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

M-6.3 **Hawthorne Boulevard Sidewalks**. Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

M-6.4 **Sidewalk and Bikeway Gaps**. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

M-6.5 **Bicycle/Pedestrian Facilities at New Developments**. Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

M-6.6 **Effects of New Technologies on Active Transportation**. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

M-6 Actions

M-6a As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

M-6b Implement the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

M-6c Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

GOAL M-7 GOODS MOVEMENT

A community that integrates safe and efficient goods movement into the local transportation network.

Planning for a transportation system to facilitate goods movements is necessary to anticipate regional and local needs for the safe and efficient movement of goods and people, while minimizing negative impacts on local circulation and sensitive land uses.

M-7 Policies

M-7.1 **Local Truck Routes**. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

M-7.2 **Roadway Design**. Maintain roadway design standards to facilitate access to light industrial and manufacturing areas along designated truck routes.

M-7 Actions

M-7a Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

M-7b Monitor e-commerce trends and develop regulations and guidance to address potential adverse effects of goods movement deliveries, including increased truck traffic and increased demand for curbside loading.

GOAL M-8 FUNDING

A community with a well-funded and fiscally sound transportation system that utilizes a variety of funding methods.

Funding and financing sources are available at the regional, state, and federal level to help realize the City's transportation vision and mobility plan. These funds can complement the City's resources to plan, design and implement circulation and access improvements and promote the General Plan's goals.

M-8 Policies

M-8.1 **Innovative Funding.** Research and pursue innovative funding sources at the federal, state, regional, and county level to implement transportation projects.

M-8.2 **Regional Funding.** Encourage regional agencies to continue to provide adequate transportation funding to local jurisdictions such as Metro's Measure R and Measure M to fund capital projects and programs.

M-8.3 **Development Fees.** Ensure that new development projects contribute their appropriate fair share to transportation network improvements.

M-8 Actions

M-8a Develop and support a flexible financing program to fund the construction, maintenance, and improvement of the roadway system.

M-8b Monitor federal, State, and Metro funding programs to identify potential sources of funds for transit programs, to implement the City bikeway system, to improve crosswalks and transit facilities improvements in the City in Lawndale. Pursue any potential funding through the identified programs.

GOAL M-9 TRANSPORTATION MANAGEMENT

A community with transportation management strategies that contributes to achieving regional and statewide greenhouse gas emission targets.

Recent state legislation has shifted to focus land use and transportation planning on reducing vehicle miles traveled (VMT), in alignment with a goal to reduce greenhouse gas emissions (GHG) and address climate change. Transportation management strategies that promote alternatives to single-occupancy vehicle travel can be employed to guide land use and transportation decisions in support of these environmental goals.

M-9 Policies

M-9.1 **Vehicle Miles Traveled Guidelines.** Require vehicle miles traveled (VMT) analysis for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain Level of Service (LOS) standards for the purposes of planning and designing street improvements.

M-9.2 **Transportation Demand Management.** Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

M-9.3 **Regional Coordination.** Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

M-9.4 **New Development.** Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

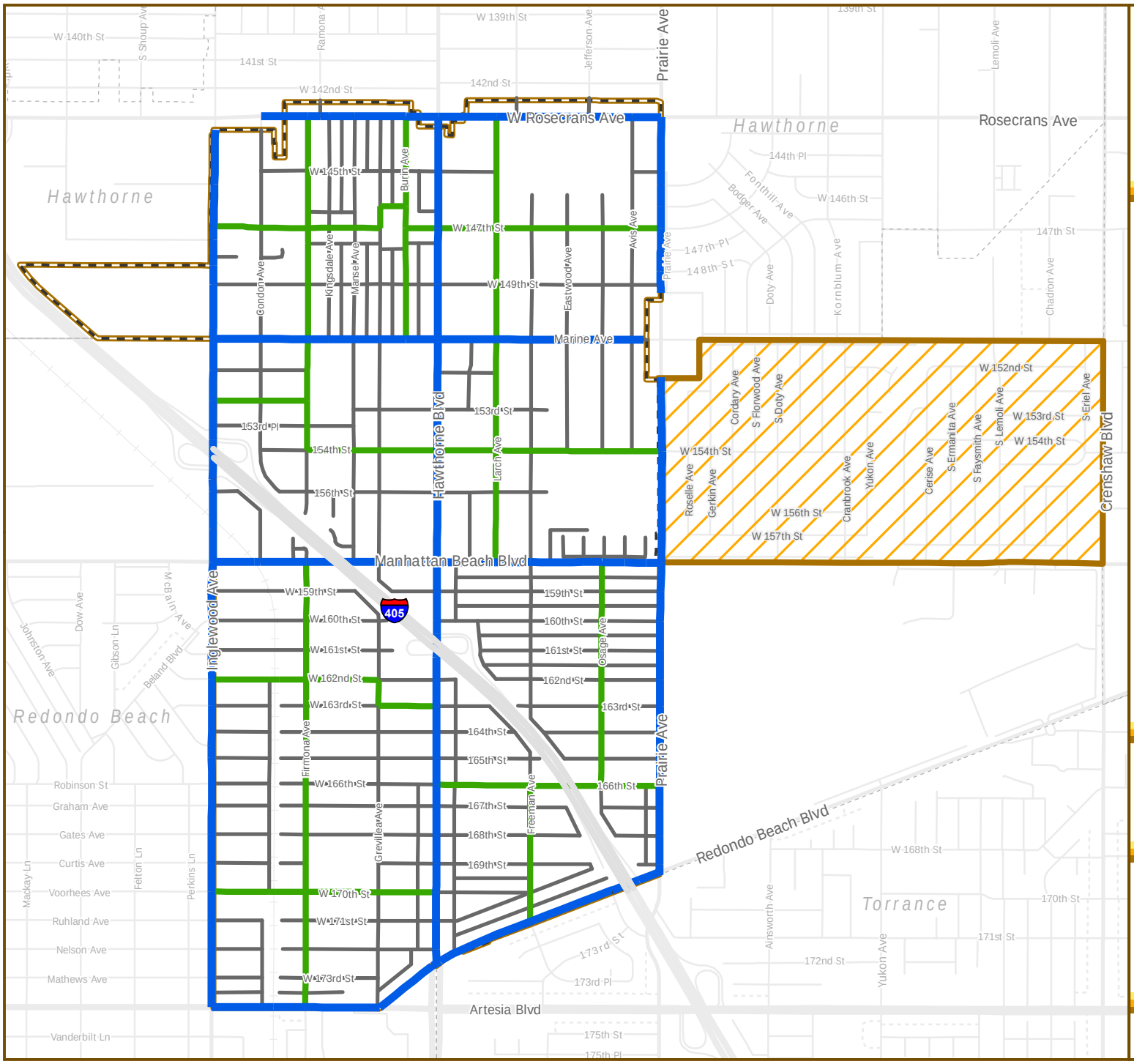
M-9 Actions

M-9a Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

M-9b Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

M-9c Consider adoption of vehicle miles traveled (VMT) guidelines and thresholds for transportation analysis for the purposes of environmental review under the California Environmental Quality Act (CEQA).

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure M-1. Functional Classification

LEGEND

- Freeway
- Major Arterial
- Collector
- Local Street
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

0 500 1,000
Feet

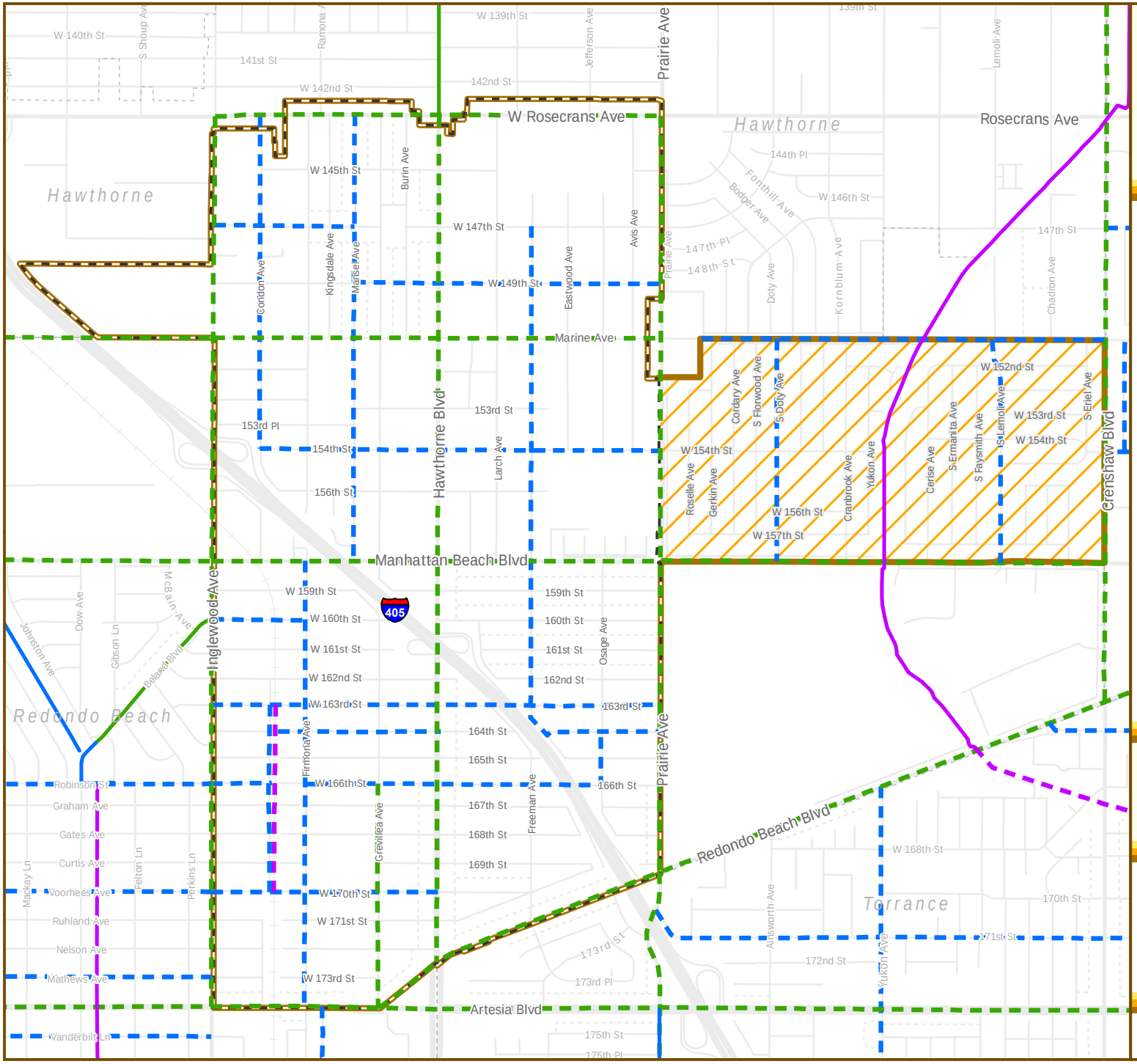
Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure M-2. Existing and Planned Bike Facilities

LEGEND

Existing Bike Facilities

- Class I Bike Paths
- Class II Bike Lanes
- Class III Bike Routes
- Class IV Protected Bike Lanes

Proposed Bike Facilities

- Class I Bike Paths
- Class II Bike Lanes
- Class III Bike Routes
- Class IV Protected Bike Lanes
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

0 500 1,000
Feet

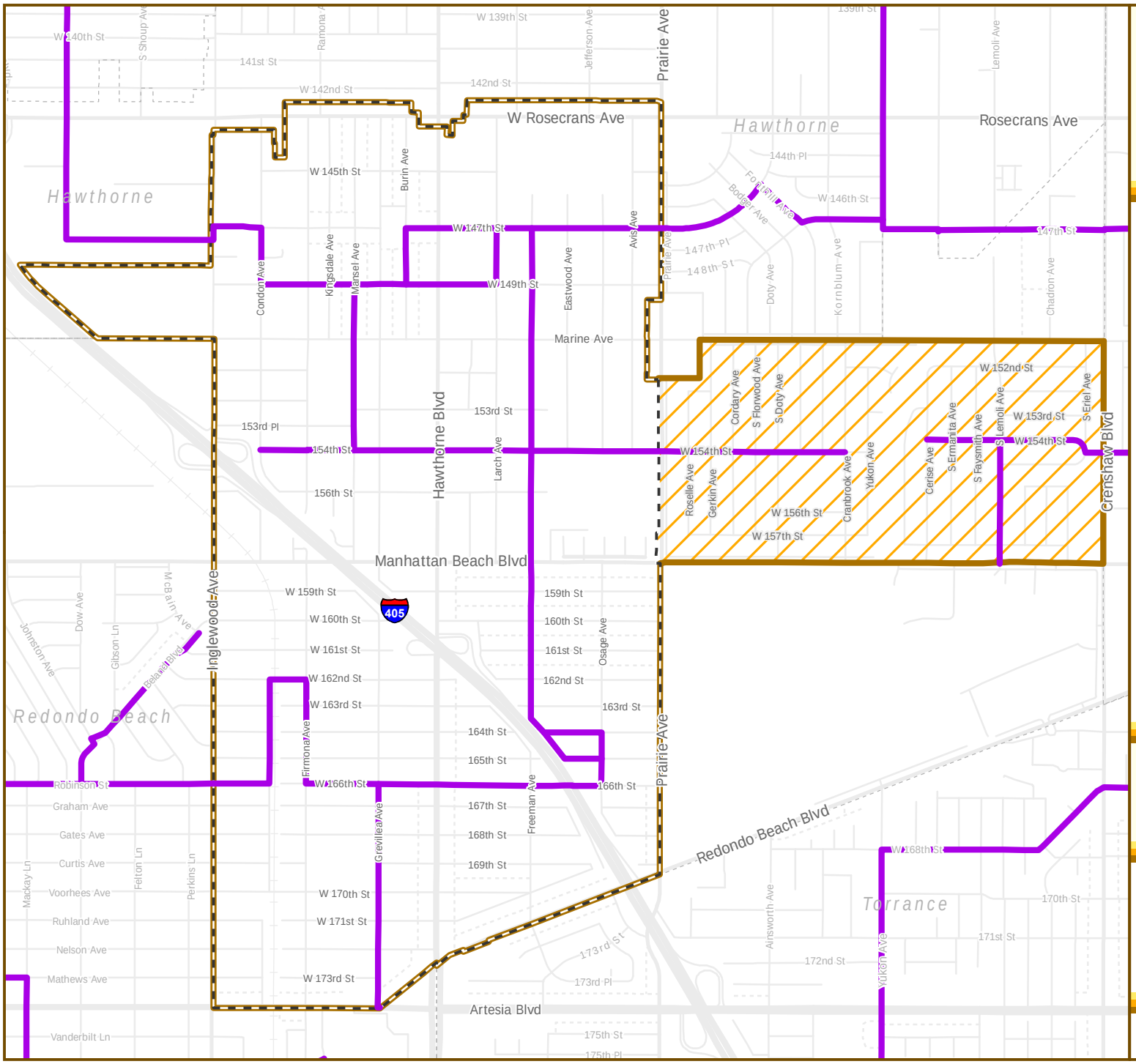
Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure M-3. Local Transportation Network

LEGEND

- Local Transportation Network
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

Introduction to Resource Management

The focus of this Element is to deliver the goals, policies and actions to preserve and protect the City of Lawndale's invaluable resources. Preservation and improvement of these resources require careful planning and effective management. These resources may be natural (such as biological resources) or man-made (such as energy infrastructure). Together, the City's resources form part of the City's unique character. The Resource Management Element provides strategies to maintain the City's character that serves to enhance the residents' and visitors' quality of life through a variety of open spaces, services, and the continued effort to conserve natural resources.

Organization of Element

The Resource Management Element will address each of the topics below as they relate to Lawndale. The goals and policies of this element are organized around the following topics:

- Parks, Recreation, and Open Space
- Solid Waste Management and Recycling
- Cultural Resources
- Air Quality and Greenhouse Gas Emissions
- Energy Resources
- Water Conservation

GOAL RM-1 PARKS, RECREATION, AND OPEN SPACE

A community with attractive, safe and accessible parks, recreation, and open space areas.

Parks, recreation, and open space facilities provide innumerable benefits that enrich a community. There are two forms of parkland provided in the City – parks that are City-owned and parks that are contracted through a Joint Powers Agreement with the Lawndale Elementary School district for City utilization. The City operates the Harold E. Hofmann Community Center and the Dan McKenzie Community Garden. The City strives to provide well-planned, welcoming, and safe opportunities for recreation to all members of the community.

RM-1 Policies

RM-1.1 **Recreation Types**. Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

RM-1.2 **Parkland Standard.** Achieve a minimum parkland standard of 3 acres per 1,000 City residents.

RM-1.3 **Open Space for Private Developments**. Require new private residential development to incorporate on-site open areas, greenspace, or recreational facilities for resident use.

RM-1.4 **Parkland Funding**. Actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs.

RM-1.5 **Partnerships and Joint-Use Agreements.** Collaborate with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public.

RM-1.6 **Non-Residential Open Space**. Encourage outdoor gathering spaces, such as mini-parks and plazas, be incorporated into private non-residential development to encourage social interaction, create experience-oriented centers, and enhance the visual character of the community.

RM-1.7 **Street Trees**. Provide for the consistent use of street trees along all sidewalks and property frontages.

RM-1.8 **Creative Open Space and Parks.** Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

RM-1.9 **Active Transportation Trails.** Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

RM-1.10 **Service Area Radius**. Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

RM-1.11 **CPTED**. Utilize "Crime Prevention Through Environmental Design" (CPTED) principles in the design and renovation of new and existing parks and open space facilities.

RM-1 Actions

RM-1a Periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development.

RM-1b Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

RM-1c Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

RM-1d Continue to work with the Lawndale Elementary School District to maximize the joint use of facilities and pursue additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

RM-1e Advertise recreational programs and promote the use of the Civic Center and Prairie Avenue Community Center facilities to promote a strong, healthy, and active community.

RM-1f Encourage commercial recreational uses to locate in Lawndale by advertising on City-owned bulletin boards and through development incentives such as, deferred or reduced development fees, and/or streamlined development review processes.

RM-1g Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

RM-1h Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

RM-1i Periodically review and update parks, recreational facilities, and community center facility rental fees as necessary to better reflect current costs to maintain and provide the facilities.

GOAL RM-2 SOLID WASTE MANAGEMENT AND RECYCLING

A community with a cost-effective, integrated waste management system that meets or exceeds recycling and waste diversion mandates and community expectations

The State of California requires communities to be proactive in addressing waste management by developing solid waste diversion and recycling programs to meet gradually increasing performance standards. The City understands that proactive waste management practices are important to protect the environment and it supports an integrated waste management approach that includes waste prevention (or "source reduction"), recycling and composting, and proper disposal of waste.

RM-2 Policies

RM-2.1 **Compliance with State Legislation.** Comply with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting.

RM-2.2 **Solid Waste Collection.** Support efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services for present and future residents and businesses, and periodically review waste collection performance to verified adequacy of service.

RM-2.3 **Hazardous Waste.** Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

RM-2.4 **Source Reduction and Recycling Efforts.** Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

RM-2.5 **Organic Waste**. Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

RM-2.6 **Fees and Funding**. Work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery.

RM-2.7 **Public Education**. Promote Citywide educational programs to inform residents of the benefits of recycling and appropriate recycling options and locations.

RM-2 Actions

RM-2a On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

RM-2b Regularly monitor the level of services provided by waste and recycling collection contractors to ensure that service levels meet the terms of the contract.

RM-2c Include standard language in request for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates.

RM-2d Encourage local businesses to provide electronic waste (e-waste) drop-off services and encourage residents and businesses to properly dispose of, or recycle, e-waste.

RM-2e Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increased participation in single-family and multi-family residential curbside recycling programs;
- Increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and
- Reduce yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

GOAL RM-3 CULTURAL RESOURCES

A community that promotes the preservation and rehabilitation of cultural resources that are significant to the Lawndale community because of their age, architecture, history, or symbolism.

The City's paleontological, archeological, historical, and tribal resources help define the community and offer opportunities for cultural, educational, and community enrichment through community events, holiday celebrations and historic preservation. The City encourages and insists on the ongoing protection and enhancement of these resources for generations to come.

RM-3 Policies

RM-3.1 **Preservation**. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

RM-3.2 **Documentation**. Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

RM-3.3 **Cultural Reminders**. Seek to incorporate reminders of the City's culture through adaptive reuse, signage, markers, cultural events, and other reminders of Lawndale's community identity and local history.

RM-3.4 **Public Education**. Educate and actively involve the public in preserving cultural assets, including techniques, incentives, and legal requirements for preservation.

RM-3.5 **Tribal Consultation.** In accordance with State, local, and Tribal intergovernmental consultation requirements, consult with Native American tribes that may be impacted by proposed development and land use policy changes, as necessary.

RM-3.6 **Historic Preservation**. Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

RM-3.7 **Funding**. With input and involvement of stakeholder groups, seek adequate funding and support from public and private sources that aim to protect cultural and historic resources within the City.

RM-3 Actions

RM-3a Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

RM-3b Evaluate the feasibility of implementing a local historic registry program that provides incentives for retrofitting and building maintenance, as well as public recognition, of the local resource.

RM-3c Consider conducting a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance.

RM-3d For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings or relocating the historic building as feasible.

RM-3e For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

RM-3f The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

RM-3g In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

RM-3h Prior to adopting any general plan, specific plan, or any amendment thereto, the City shall notify appropriate tribes of the opportunity for consultation for the purpose of preserving, or mitigating impacts to, cultural places located on land within the City's jurisdiction that may be affected by the proposed plan or amendment.

RM-3i Prior to the adoption or substantial amendment of a general plan or specific plan, the City shall refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the City's jurisdiction for a 45-day comment period.

GOAL RM-4 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Improved air quality within the City means a higher quality of life for residents, workers, and visitors. Air quality is especially important due to the City's location in the South Coast Air Basin (SCAB), which does not meet State and Federal air quality standards. Regional cooperation among all agencies in the basin is necessary to achieve desired improvements to air quality. Lawndale can assist in reducing local emissions through proper planning for land use and transportation.

RM-4 Policies

RM-4.1 **Regional Cooperation**. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

RM-4.2 **Measurement and Enforcement**. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

RM-4.3 **GHG Emissions**. Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

RM-4.4 **Transportation Options**. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

RM-4.5 **Walkability**. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

RM-4.6 **Land Use Planning**. Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

RM-4.7 **Sensitive Receptors**. Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

RM-4.8 **Mitigation**. Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

RM-4.9 **GHG Reduction**. Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

RM-4.10 **Public Engagement**. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

RM-4 Actions

RM-4a Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

RM-4b As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

RM-4c Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

RM-4d Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

RM-4e Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

RM-4f Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

RM-4g Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

RM-4h Establish programs that encourage community car-sharing and carpooling.

RM-4i Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

RM-4j Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation

or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

RM-4k Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NOx emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

RM-4l Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

GOAL RM-5 ENERGY RESOURCES

A community that safely manages its energy resources.

Future development within the City will result in increased energy demands for the operation of businesses, homes, and transportation facilities. To reduce greenhouse gas emissions, pollutants, and ensure that there are adequate energy resources for future generations, safe management and conservation methods need to be implemented.

RM-5 Policies

RM-5.1 **Compliance with State Legislation**. Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

RM-5.2 **Green Building Standards Code.** Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

RM-5.3 **Renewable Energy**. Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

RM-5.4 **Energy-Efficient Materials**. Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

RM-5.5 **Energy Conservation**. Promote energy conservation and recycling by the public and private sectors.

RM-5.6 **Energy Needs**. Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

RM-5.7 **Business Community.** Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

RM-5.8 **Public Education**. Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

RM-5.9 **Promote Energy Conservation in Existing Building Stock**. Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

RM-5 Actions

RM-5a Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

RM-5b During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

RM-5c Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

RM-5d Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

RM-5e Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

RM-5f Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

RM-5g Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

RM-5h Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

GOAL RM-6 WATER CONSERVATION

A community that protects and conserves limited water resources.

Water is an indispensable resource that is integral to Lawndale's prosperity and growth. The City embraces an integrated water management approach in order to preserve these precious resources for years to come.

RM-6 Policies

RM-6.1 **Conservation.** Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

RM-6.2 **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

RM-6.3 **Riparian Habitat.** Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

RM-6.4 **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

RM-6.5 **Reclaimed Water.** Promote the expanded use of reclaimed (recycled) water, where feasible.

RM-6.6 **Education and Appreciation**. With community partners, support a range of educational programs that cultivate an appreciation of Lawndale's urban and natural habitats and biological resources.

RM-6 Actions

RM-6a To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

RM-6b In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

RM-6c Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

This page intentionally left blank.

Introduction to Public Safety

The goal of Lawndale's Public Safety Element is to reduce the risk of death, injury, property damage, economic loss, and harm due to natural and manmade hazards. An effective response to natural and human-caused disasters requires planning, education, coordination and training by multiple government agencies and the public. A resilient community has the capacity to maintain critical functions during hazard events as well as adapt to and reduce future hazard risks.

This Element establishes goals, policies, and actions to minimize and address these potential hazards as well as support an adequate and coordinated response. The goals are statements of the City's desires and consist of broad statements of purpose and direction. The policies serve as guidelines for reducing risk associated with natural and human activity hazards. The policies also serve to direct and maximize community emergency preparedness. The actions explain how the goals and policies will be achieved and implemented.

The Public Safety Element supports the City's participation in regional and subregional planning efforts including the Lawndale Local Hazard Mitigation Plan, County of Los Angeles All-Hazards Mitigation Plan, and the Lawndale Climate Action Plan.

Organization of Element

The Public Safety Element will address each of the topics below as they relate to Lawndale. The goals and policies of this element are organized around the following topics:

- Emergency Operations
- Geologic and Seismic Hazards
- Hazardous Materials
- Fire Hazards
- Flood Hazards
- Noise
- Climate Change and Resiliency Planning

Related Plans, Programs, and Regulations

The following Plans, Programs, and Regulations are incorporated by reference into the City of Lawndale's Public Safety Element.

City of Lawndale

- **General Plan:** Lawndale's General Plan is a broad, long-range policy document that serves as a blueprint for future development in the City. It includes the Public Safety Element, as well as the Land Use, Mobility, Housing, Resource Management, Environmental Justice, Economic Development, and Community Facilities Elements.
- **Zoning Code:** The City's Zoning Code implements the goals and policies of the City's General Plan by regulating the uses of land and structures within Lawndale. The Zoning Code is codified in Title 17 of the Municipal Code.
- **Fire Code:** The Fire Code establishes requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and provides safety and assistance to fire fighters and emergency responders during emergency operations. Lawndale adopts the County of Los Angeles Fire Codes every three years. The City's Fire Code is codified in Chapter 15.20 of the Municipal Code.
- **Building Code:** The Building Code regulates construction and property use to ensure safe, healthy, efficient, and accessible environments for human occupancy and habitation. Lawndale adopts the County of Los Angeles Building and Safety Codes every three years. The City's Building Code is codified in Title 15 of the Municipal Code.
- **Local Hazard Mitigation Plan (LHMP):** The City adopted the LHMP in 2016 to assess natural hazard risk and incorporate mitigation strategies to reduce the potential impact from hazards. It complies with the Federal Disaster Mitigation Act (2000), and Federal Register 44 CFR Parts 201 and 206. The City's Emergency Preparedness Coordinator managed preparation of the LHMP in cooperation with the City's other departments, community stakeholders, partner jurisdictions, agencies and organizations, and members of the public.
- **Emergency Operations Plan (EOP):** The City adopted the EOP in 2011, which was updated in 2015. The EOP addresses the City's planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City's emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). The EOP also describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support.
- **Climate Action Plan (CAP):** The City, in cooperation with the South Bay Cities Council of Governments (SBCCOG), developed a Climate Action Plan (CAP) which was adopted in 2017. The CAP includes measures to reduce human-caused greenhouse gas emissions and enhance carbon storage, or sequestration, as a local response to mitigate global climate change and comply with State and Federal legislation.

Los Angeles County

- **County of Los Angeles All-Hazard Mitigation Plan (AHMP):** The AHMP was adopted in 2014 and conforms to the requirements of Federal Emergency Management Agency (FEMA) Disaster Mitigation Act of 2000. The County developed the AHMP to cover mitigation responsibilities of County departments (including Los Angeles County Sheriff's Department (LASD)). It helps ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency.
- **Los Angeles County Operational Area Emergency Response Plan (OAERP):** The OAERP was adopted in 2012 and establishes the coordinated emergency management system, which includes prevention, protection, response, recovery, and mitigation within the Los Angeles County Operational Area (OA). The OA is defined as the County and all political subdivisions within the County.
- **Los Angeles County Fire Department 2020 Strategic Fire Plan:** The Strategic Fire Plan outlines goals focused on enhancing the protection of lives, property, and natural resources from wildland fire, as well as improving environmental resilience to wildland fires through local, State, Federal, and private partnerships. The 2020 Plan is focused on three primary goals: emergency operations, public service, and organizational effectiveness.

Los Angeles County Fire District Facilities Master Plan: The Master Plan was prepared in 2020 as a collaborative effort between the LA County Fire District and the LA County Chief Executive Office. The Plan evaluates the current capacity, condition, and functionality of the Fire District's facilities and then projecting future capacity deficits utilizing Southern California Association of Governments (SCAG) population growth projections and methodologies.

GOAL PS-1 EMERGENCY OPERATIONS

A community prepared to provide effective response and recovery efforts in the event of an emergency.

Advanced emergency planning and preparedness is essential in responding to natural and human-caused disasters. The City supports multi-jurisdictional and -agency cooperation and communication for emergency planning and response management. Public safety services in Lawndale are provided by the Los Angeles County Sheriff's Department (LASD) South Los Angeles Station and the Los Angeles County Fire Department (LACoFD) Kenny Hahn Memorial Fire Station No. 21.

The City will continue to coordinate with LASD and LACoFD to provide ongoing education to residents about how to safely evacuate in the event of an emergency. While the California Government Code requires jurisdictions to identify residential developments in hazard areas that do not have at least two emergency evacuation routes, there are not any hazard areas within the boundary of Lawndale and therefore this analysis is not warranted. Major arterials serve as the primary routes for evacuation; however, evacuation routes will depend upon the emergency event and area affected. Law enforcement will identify the appropriate routes and assist residents leaving the City in the event an evacuation of all or part of the City is required.

PS-1 Policies

PS-1.1 **Citywide Safety.** Support projects, programs, policies, and regulations that help to mitigate potential impacts associated with natural and man-made hazards.

PS-1.2 **Critical Facilities.** Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

PS-1.3 **Emergency Preparedness and Response.** Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

PS-1.4 **Local Hazard Mitigation.** Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

PS-1.5 **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

PS-1.6 **Emergency Access.** Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

PS-1.7 **Public Safety Education.** Promote public safety education programs to educate on emergency preparedness, reduce accidents, injuries, and fires, and to train members of the public to respond to emergencies.

PS-1.8 **Cooperation.** Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

PS-1 Actions

PS-1a Regularly review and coordinate emergency response procedures with Los Angeles County and State emergency response procedures.

PS-1b Continue to implement and update (when relevant) the City's Emergency Operations Plan.

PS-1c Continue to implement and update (at least every five years) the City's Local Hazard Mitigation Plan.

PS-1d Coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

PS-1e Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

PS-1f Promote after school programs, volunteer programs, and Business & Neighborhood Watch programs to help maintain a safe environment.

GOAL PS-2 GEOLOGIC AND SEISMIC HAZARDS

A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Lawndale is within the northern margin of the Peninsular Ranges. The topography of Lawndale is relatively flat with an elevation of approximately 59 feet above sea level. Like most cities in the Southern California region, Lawndale is subject to risks associated with potentially destructive earthquakes. Although there are no designated Alquist-Priolo fault zones within the City, regional fault zones may have an impact on the City if the rupture is of a significant magnitude. There are numerous earthquake faults within 15 miles of the City. The most active faults near the City are the Palos Verdes fault located to the south and the Newport-Inglewood fault to the northeast.

As detailed in the Existing Conditions Report, there are no areas within the City designated as having the potential for liquefaction, in addition Lawndale does not have areas susceptible to earthquake-induced landslides and other slope failures. Most areas in the City are considered to have a low potential for erosion. Generally, erosion potential within the City increases to the south. The majority of the City has 'Low to Medium' expansive soils. Only a small portion of the City has areas with 'Low to High' expansive soils and potential for non-seismically induced landslides. The City of Lawndale does not have any historic or current U.S. Geological Survey-recorded subsidence. Because existing soil types are well-drained and permeability is moderate to slow, the risk for collapsible soils is low. According to the California Geological Survey, there is no naturally occurring asbestos mapped within the City. Lawndale is not within a tsunami or seiche hazard area. Risk of exposure to natural hazards can be reduced through careful land use planning, building construction practices, and implementation of the following policies and actions.

PS-2 Policies

PS-2.1 **Geologic Hazard Identification.** Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

PS-2.2 **Earthquake Protection**. Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

PS-2.3 **Development Projects**. Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

PS-2.4 **Seismic Hazard Education.** Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

PS-2 Actions

PS-2a Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

PS-2b Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

PS-2c Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

PS-2d During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

PS-2e Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

GOAL PS-3 HAZARDOUS MATERIALS

A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Certain types of development and uses within the City utilize hazardous materials, such as gas stations and automobile repair shops. These uses make Lawndale susceptible to hazards from spills of toxic materials. Accidents can occur in the production, use, storage, transport, and disposal of hazardous materials. This danger is mitigated, however, by various State and federal legislation regulating the use, storage, and transportation of hazardous materials and the strict enforcement of these regulations. The Los Angeles County Fire Department (LACoFd) Health Hazardous Materials Division maintains an emergency response team that would respond in the event of a hazardous materials spill or other environmental health emergencies.

The Los Angeles County Department of Public Health, Environmental Health Division enforces the provisions of the Hazardous Waste Control Law of the State of California as set forth in the California Health and Safety Code and the California Code of Regulations. The City coordinates with the Los Angeles County Department of Public Health, Environmental Health Division to effectively manage hazardous materials and waste as well as implement educational programs.

LACoFD maintains the mandatory disclosure file on use (or non-use), handling, and storage practices of hazardous materials and hazardous wastes annually of all businesses. Inventories of hazardous materials are data-processed for immediate availability to fire, police, and other first-responder (i.e. first at the scene of an incident) departments. These potential risks are carefully monitored and controlled through annual inspection.

PS-3 Policies

PS-3.1 **Compatible Land Uses.** Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

PS-3.2 **Safe Residential Uses.** Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

PS-3.3 **Emergency Operations.** Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

PS-3.4 **Cleanup Sites.** Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

PS-3.5 **Monitoring.** Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

PS-3.6 **Transportation.** Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

PS-3.7 **Pipelines**. Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

PS-3.8 **Rail Lines**. Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

PS-3.9 **Public Education.** Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

PS-3 Actions

PS-3a As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

PS-3b Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

PS-3c Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

PS-3d Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

PS-3e Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

GOAL PS-4 FIRE HAZARDS

A community protected from loss of life or injury and damage to property due to fire hazards.

There are no Fire Hazard Severity Zones located within Lawndale and no threat of wildland fire. Due to the urbanized character of the City, fires would primarily be associated with structures, trash/debris, and vehicle fires. Structure fires, including homes, industrial and commercial buildings, and other facilities are of the greatest concern due to the potential for loss of life as well as property. Generally, the risk of injury and damage is greater for higher occupancy structures, such as condominiums, apartment buildings, hotels, and churches. In addition, higher density areas are of increased concern due to the large number of people residing within a concentrated area and the potential for fires to spread from one structure to another. Lawndale is one of the most densely populated areas within Los Angeles County. Development of the City has resulted in small lot development with multiple structures on single lots and narrow streets. Emergency access is limited between the closely spaced structures and along the narrow streets that occur throughout the City. On-street parking, especially during the evening hours, further restricts the access and maneuverability of fire equipment. Due to the nature of the development that has occurred, many structures do not meet current emergency access requirements.

PS-4 Policies

PS-4.1 **Fire Protection Services.** Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

PS-4.2 **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

PS-4.3 **Emergency Access.** Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

PS-4.4 **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

PS-4.5 **Hazard Mitigation Plans**. Coordinate with local, State, and federal agencies to update emergency, evacuation, and hazard mitigation plans, as necessary.

PS-4 Actions

PS-4a Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

PS-4b Work with LACoFD to disseminate educational programs for residents on fire hazard risks and fire safety measures.

GOAL PS-5 FLOOD HAZARDS

A community that is protected from flood hazards.

The City has been designated on the Flood Insurance Rate Map (FIRM), as being in Zone X, which is a Non-Special Flood Hazard Area. Zone X includes areas that are:

- Outside the 1% annual flood risk floodplain
- Of 1% annual shallow flooding risk where average depths are less than 1 foot
- Of 1% annual stream flooding risk where the contributing drainage area is less than 1.0 square mile
- Protected by levees from the 1% annual flood risk

These areas are not in any immediate danger from flooding caused by overflowing rivers or hard rains. However, it is noted that structures within a Non-Special Flood Hazard Areas are still at risk, particularly to localized flooding. The City is not in a dam inundation zone so is not as risk of flooding from dam or reservoir failure.

PS-5 Policies

PS-5.1 **Flood Control Regulations.** Coordinate with local, state, and federal agencies so that the City's regulations related to flood control are in compliance with Federal, State, and Local standards.

PS-5.2 **Flood Maps.** Coordinate with Federal Emergency Management Agency (FEMA) so that Federal Insurance Rate Maps correctly depict flood hazards in the City.

PS-5.3 **Site Design.** Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

PS-5.4 **Best Management Practices.** Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

PS-5.5 **Changing Conditions.** Coordinate with the Los Angeles County Flood Control and Waterworks Districts on changing flood conditions associated with climate change and extreme weather.

PS-5.6 **Local Storm Drainage Infrastructure.** Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

PS-5 Actions

PS-5a Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code and building codes as required.

PS-5b Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.

PS-5c Periodically review County, State, and Federal flood control best practices and incorporate appropriate standards into the Municipal Code.

GOAL PS-6 NOISE

An environment where excessive or harmful noise pollution is limited.

Noise levels within the community can affect the quality of life experienced by people living and working in Lawndale. High noise levels can create stress and irritation. The following policies and actions address other potential sources of excessive noise by creating effective strategies to reduce and limit the community's exposure to loud sources of noise.

PS-6 Policies

PS-6.1 **California Building Code.** Adhere to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community.

PS-6.2 **Noise Exposure**. Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Table PS-1 and the Lawndale Municipal Code to facilitate acceptable noise exposure levels for existing and future development.

PS-6.3 **Noise Mitigation**. Require new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

PS-6.4 **Acoustical Studies**. Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element. For projects that are required to prepare an acoustical study, the following mobile and stationary noise source criteria shall be used to determine the significance of those impacts.

A. Mobile Noise Sources:

- Where existing traffic noise levels are within or below the "normally acceptable" noise criteria at the affected land use (see Table PS-1), a readily perceptible 5 dBA CNEL or greater increase in roadway noise will be considered significant;
- Where existing traffic noise levels falls within the "conditionally acceptable" noise criteria at the sensitive land use, a +3 dBA CNEL or greater increase in roadway noise levels will be considered significant; and
- Where existing traffic noise levels exceed the "conditionally acceptable" noise criteria at the sensitive land use, a + 1.5 dBA CNEL or greater increase in roadway noise levels will be considered significant

B. Stationary and Non-Transportation Noise Sources

A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

PS-6.5 **Roadway Noise**. Encourage nonmotorized transportation alternatives for local trips and the implementation of noise sensitivity measures in the public realm, including traffic-calming road design, lateral separation, natural buffers, and setbacks to decrease excessive motor vehicle noise.

PS-6.6 **Freeway Noise**. Coordinate with the California Department of Transportation (Caltrans) to achieve maximum noise abatement in the design of new freeway projects or improvements along I-405.

PS-6.7 **Railroad Noise**. Coordinate with Burlington Northern and Santa Fe Rail (BNSF) to support and maintain reasonable limits on the use of bells and whistles, and the speed and hours of rail operation in affected areas of the City and maintain adequate setbacks and buffer zones along rail lines to reduce adverse noise impacts on sensitive receptors.

PS-6.8 **Commercial Noise**. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

PS-6.9 **Construction Noise**. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices.

PS-6.10 **Special Events**. Temporary special events which generate noise in excess of local noise standards including, but not limited to, festivals, concerts, parades, and other similar activities may be considered on a case-by-case basis through issuance of a temporary use permit.

PS-6.11 **Temporary Emergency Operations and Emergency Equipment Usage**. Temporary emergency operations or emergency equipment usage are exempt from noise standard criteria set by this element.

PS-6.12 **Interjurisdictional and Multiagency Coordination**. Coordinate with neighboring cities and transportation providers such as Caltrans to minimize noise conflicts between land uses along the City's boundaries.

PS-6.13 **Community Education**. Provide education to the community regarding potential noise sources and how to reduce them or report violations.

PS-6.14 **Vibration Studies.** Require vibration impact studies for new discretionary development and transportation improvements whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

PS-6 Actions

PS-6a Monitor changes in the California Building Code and other Federal and State laws and regulations related to noise and incorporate necessary changes into the Municipal Code and building codes as required.

PS-6b Review the Lawndale Municipal Code and update as necessary so that the noise standards are consistent with this General Plan, including Table PS-1, and to require new residential, mixed-use with a residential component, and other noise-sensitive development to be designed to minimize noise exposure to noise sensitive uses through incorporation of site planning and architectural techniques. The update shall also include noise standards for residential uses within a mixed-use development, which may differ from other adopted residential noise standards.

PS-6c Review new development and transportation projects for compliance with the noise requirements established in this General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code. Where necessary, require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials such as rubberized asphalt.

PS-6d Require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in this General Plan. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with this element.

PS-6e Review the locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process. Limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved.

PS-6f Require all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible.

PS-6g Actively enforce the standards identified within the Lawndale Municipal Code to reduce impacts to the extent feasible. Update and amend the Lawndale Municipal Code as appropriate. Provide a link on the City's website for those to file complaints against activities and uses that may be violating the Municipal Code.

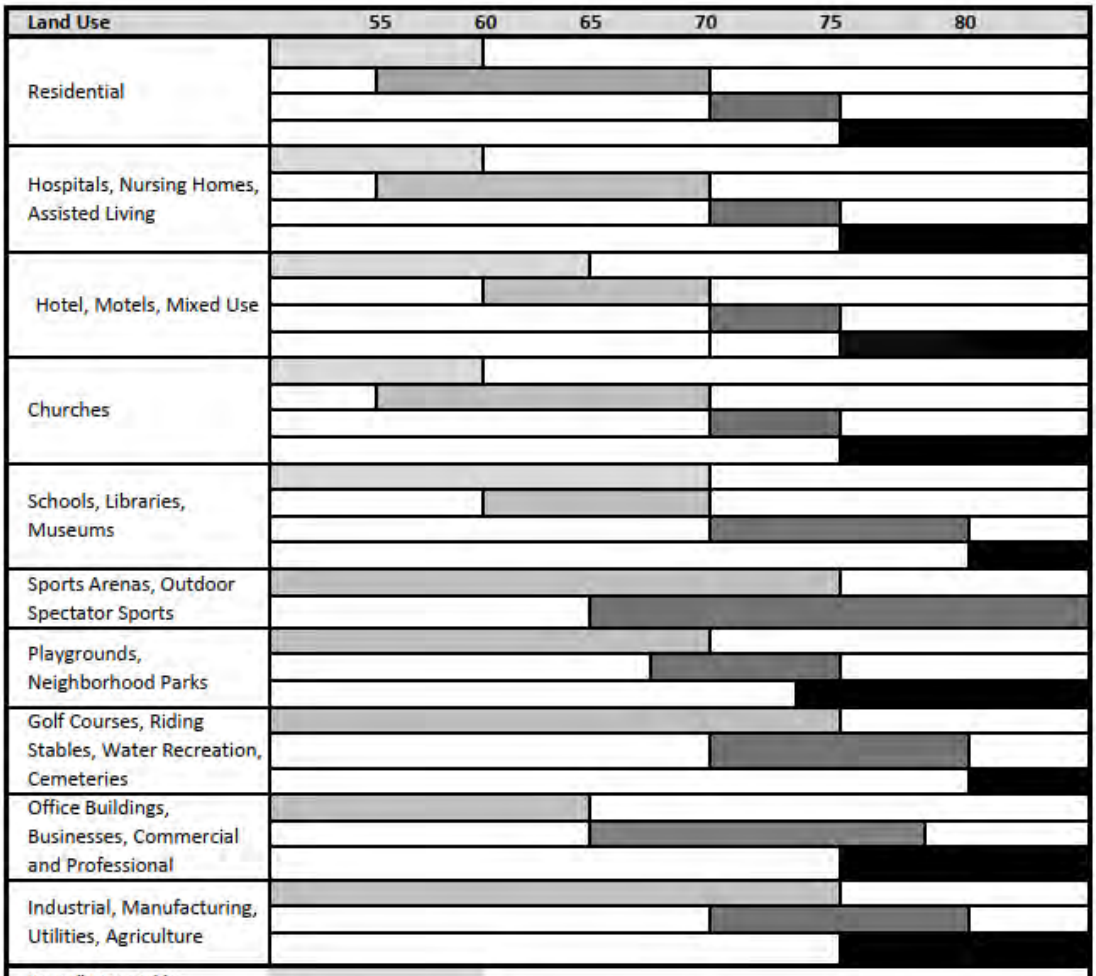
PS-6h Require new residential projects located adjacent to railroad lines to follow the FTA vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day).

PS-6i Enforce the provisions of the most current California Motor Vehicle Code regarding muffler maintenance and exhaust systems.

PS-6j Limit truck traffic in noise sensitive areas.

PS-6k Require vibration impact studies for all new discretionary projects, including those related to development and transportation, whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The studies shall include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation's Construction Vibration Guidance Manual.

Table PS-1: Land Use Compatibility for Community Noise Exposure (dBA, CNEL)



Normally Acceptable:

Specified land uses is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation or requirements.

Conditionally Acceptable:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.

Normally Unacceptable:

New construction and development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable

New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: California Office of Noise Control. Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 2017.

Notes:

1. Where a proposed use is not specifically listed, the use shall comply with the standards for the most similar use as determined by the City.

2. Outdoor activity areas for residential development are considered to be the backyard patios or decks of single-family units and the common areas where people generally congregate for multi-family developments. Where common outdoor activity areas for multi-family developments comply with the outdoor noise level standard, the standard will not be applied at patios or decks of individual units provided noise-reducing measures are incorporated (e.g., orientation of patio/deck, screening of patio with masonry or other noise-attenuating material). Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities; not all residential developments include outdoor activity areas.

GOAL PS-7 CLIMATE CHANGE AND RESILIENCY PLANNING

A resilient, sustainable, and equitable community where risks to life, property, the economy, and the environment resulting from climate change are minimized.

The impacts of climate change pose an increasing and growing challenge to the safety and well-being of the residents of Lawndale. California will continue to experience effects of climate change in different ways, including increased likelihood of drought, heat waves, severe weather, flooding, and wildfires. In addition to climate change planning becoming necessary on its own merits, Senate Bill 379 requires Lawndale to update the Public Safety Element to address climate change adaptation and resilience strategies applicable to the City.

Lawndale developed a Climate Action Plan (CAP) in cooperation with the South Bay Cities Council of Governments in 2017. The CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years.

Lawndale's Local Hazard Mitigation Plan (LHMP) assesses climate change vulnerability and identifies risks that climate change pose to the City. The following policies are informed by, and intended to supplement, the CAP and LHMP.

PS-7 Policies

PS-7.1 **Community Preparedness.** Promote a well-prepared City that can effectively overcome natural disasters and scarcity of resources due to climate change.

PS-7.2 **Collaboration.** Collaborate with local, regional, State and/or Federal jurisdictions and agencies on climate resiliency and adaptation strategies.

PS-7.3 **Ecological Recovery.** Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

PS-7.4 **Air Pollution.** Work with responsible Federal, State, and County agencies to decrease air pollution emissions occurring within the air basin to reduce the risk posed by air pollution.

PS-7.5 **Energy Supply.** Promote plans and programs that increase sustainable energy sources.

LOOKING AHEAD

As Lawndale looks to the future, State law requires the City to consider climate impacts facing California as well as methods to adapt and increase resiliency to climate change effects. As a result of climate change, Lawndale may experience more intense and frequent heat waves, drought, and wildfires, and more severe storms and extreme weather events.

Emissions scenarios used in the General Plan and Environmental Impact Report are the same as those used by the Intergovernmental Panel on Climate Change's Sixth Assessment Report and are called Representative Concentration Pathways, or RCPs. There are five RCPs: SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5. Each represents a set of possible underlying socioeconomic conditions, policy options, and technological considerations, spanning from a low-end scenario that requires significant emissions reductions resulting in zero global emissions by 2050 (RCP 1.9) to a high-end, "business-as-usual," fossil-fuel-intensive emissions scenario (RCP 8.5). The low-end scenario is most closely aligned with California's ambitious greenhouse gas reduction targets and the aspirational goals of the United Nations Framework Convention on Climate Change 2015 Paris Agreement. Thus far, global emissions continue to follow the business-as-usual trajectory.

PS-7.6 **Drought Preparation.** Implement necessary actions and programs to improve drought preparation and response for the most vulnerable community members.

PS-7.7 **Cooling Centers.** Designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters; extend hours at air-conditioned sites during periods of extreme heat or power outage (if the site is supported by a backup generator).

PS-7.8 **Storms.** Provide access to flood protection resources and services (signage, sandbags, etc.) as feasible at designated public facilities during and after extreme weather events.

PS-7.9 **Special Assistance.** Address the needs of individuals with limited mobility or limited access to transportation for access to safe and comfortable shelter during extreme heat events or other severe weather events.

PS-7.10 **Leadership.** Demonstrate leadership in local climate planning efforts through a range of tangible actions and policies at the municipal operations level.

PS-7.11 **Greenhouse Gas Reductions.** Reduce communitywide greenhouse gas emissions locally by actively support regional efforts to reduce greenhouse gases throughout the region.

PS-7.12 **Extreme Heat Vulnerabilities.** Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.

PS-7.13 **Ongoing Monitoring.** Monitor climate change-related effects with local, regional, state, and/or federal partners to provide information of effectiveness of existing infrastructure and programs.

PS-7 Actions

PS-7a Provide information and resources to the public and businesses regarding steps the City is taking to address the issue of climate change.

PS-7b Expand the use of energy-efficient lighting, such as LEDs, for City-owned light facilities.

PS-7c Consider purchasing only electric or alternative-energy vehicles for the City vehicle fleet, as appropriate, based on the intended use of the vehicle.

PS-7d Evaluate the feasibility for government-constructed and/or -operated new development to exceed the California Green Building Standards Code CalGreen Tier 1, or successor program, standards.

PS-7e Promote the use of sustainable and carbon-neutral energy sources in new development.

PS-7f Explore using renewable energy and clean generation technologies such as solar, wind, biogas, or fuel cells to power City facilities where appropriate.

Introduction to Environmental Justice

The Environmental Justice Element seeks to reduce disproportionate impacts on vulnerable populations in Lawndale and promote equal distribution of resources. Senate Bill 1000 (SB 1000), the Planning for Healthy Communities Act, was signed into law by then Governor Jerry Brown, on September 24, 2016. It mandates that cities and counties with Environmental Justice Communities (described below) adopt an Environmental Justice Element or integrate appropriate goals, objectives, and policies into other elements of their general plans, with the intent to create healthier places. The City of Lawndale has chosen to prepare a separate element so that all Environmental Justice-related goals, policies, and actions are conveniently located in one document for easy reference.

Environmental Justice Communities

Environmental Justice Communities are described by the California Communities Environmental Health Screening Tool (CalEnviroScreen) as areas (i.e., census tracts) of a city or county that have higher environmental burdens and vulnerabilities than other areas. Based on data from CalEnviroScreen Version 4.0 and the California Air Resources Board (CARB) Priority Populations Mapping Tool, all seven census tracts in the Planning Area are considered to be Environmental Justice Communities (Figure EJ-1). The methodology is described in more detail in the Existing Conditions Report. This Environmental Justice Element supports continued improvements for areas identified as Environmental Justice Communities as well as neighborhoods throughout the City, as a whole.

Organization of Element

The Environmental Justice Element will address each of the topics below as they relate to Lawndale. The goals and policies of this element are organized around the following topics:

- Pollution Exposure and Air Quality
- Access to Public Facilities
- Healthy Food Access
- Safe and Sanitary Homes
- Physical Activity
- Civic Engagement
- Improvement and Programs

GOAL EJ-1 POLLUTION EXPOSURE AND AIR QUALITY

Pollution exposure is reduced and air quality is enhanced through land use and development patterns, especially in Environmental Justice Communities.

Pollution exposure occurs when people come into direct contact with air, food, water, and soil contaminants and is often the result of incompatible land uses sited adjacent to each other. Sensitive populations (such as children, the elderly, and those with compromised immune systems) and sensitive land uses (such as schools, day cares and hospitals) are the most susceptible to pollution exposure. Environmental Justice Communities are often disproportionately burdened by multiple sources of pollution exposure. Pollution can come from many sources including storage tanks leaking hazardous chemicals into soil and groundwater, agricultural land uses applying pesticides, mobile sources such as vehicles emitting exhaust, and stationary sources such as diesel engines emitting exhaust.

EJ-1 Policies

EJ-1.1 **Emission Sources.** Encourage existing sources of emissions to use feasible measures to minimize air quality impacts in Environmental Justice Communities and avoid new sources of significant emissions in these communities, as feasible.

EJ-1.2 **Green Industry.** Attract non-polluting industry and green technology companies to the City.

EJ-1.3 **Traffic-Related Emissions**. Support strategies to reduce traffic-related emissions such as timed-signals and vegetative barriers.

EJ-1.4 **Bicycle and Pedestrian Facilities**. Encourage development of bicycle and pedestrian facilities to reduce dependency on transportation options that emit pollutants. *(See Mobility Element)*

EJ-1 Actions

EJ-1a Coordinate with South Coast Air Quality Management District (SCAQMD) and California Air Resources Board (CARB) to ensure enforcement of air quality permits.

EJ-1b Collaborate with local and regional partners to identify strategies for reducing the asthma rate in the City.

EJ-1c Create a plan to clean up identified contaminated groundwater sites (Leaking Underground Storage Tank Sites, Department of Defense Sites, Cleanup Program Sites) in the City.

EJ-1d Work with the community to identify gaps in the bicycle and pedestrian network and research and apply for grants to help fill the identified gaps.

GOAL EJ-2 ACCESS TO PUBLIC FACILITIES

Public facilities and services are equitably distributed throughout the City of Lawndale and are easily available to residents of Environmental Justice Communities.

The adequate provision of public facilities is a critical component to the current and future prosperity of a community. Under State law (SB 1000), "public facilities" is an umbrella term that includes "public improvements, public services, and community amenities". This covers a wide spectrum of publicly provided uses and services including infrastructure, school facilities, parks, and transportation and emergency services. These amenities and services act to improve the health, safety, and well-being of a community by either enhancing the public sphere or providing services that are available to every resident. Insufficient public facilities can have significant impacts to the health and quality of life of residents, and historically, Environmental Justice Communities have struggled with insufficient access to public facilities and substandard amenities more than other communities.

EJ-2 Policies

EJ-2.1 **Convenient Access**. Consider the ease of accessibility of public facilities in relation to Environmental Justice Communities during the review and evaluation of public facility expansion, replacement, and construction.

EJ-2.2 **Prioritize Resources**. Support opportunities to meet parks, recreation, and open space needs in underserved areas of the City that have a demonstrably greater need for these amenities.

EJ-2.3 **Keep Pace with Development**. Ensure that the development of parks and recreation facilities and services keep pace with development and growth within the City. *(See Resource Management Element)*

EJ-2.4 **Coordination.** Coordinate with partnering agencies that provide public facilities and services within the City to ensure effective, efficient, and equitable service delivery.

EJ-2.5 **Local Transit.** Encourage local transit providers to establish and maintain routes and services that provide the community with convenient access to jobs, shopping, schools, parks, and healthcare facilities, where feasible.

EJ-2 Actions

EJ-2a Explore areas to add enhanced safety features at crosswalks.

EJ-2b Coordinate with the Police Department to address safety in parks and along walking/biking routes.

EJ-2c Investigate the possibility of adding more recreation classes to meet the needs of the community.

EJ-2d Consider distributing City events across multiple public spaces, as feasible.

GOAL EJ-3 HEALTHY FOOD ACCESS

Healthy food and nutritional choices are accessible for all community members.

Food plays a critical role in the health of a community. Therefore, it is essential that all residents have access to food that is healthy, affordable, and culturally appropriate. Environmental Justice Communities may face constraints related to accessibility to nutritional food, and this lack of accessibility has a direct impact on personal health and well-being. Food access is not only associated with the physical accessibility of affordable and culturally appropriate food, but also with food security, defined as access by all people at all times to *enough* food for an active, healthy life. Food security includes the availability of nutritionally adequate and safe foods as well as the ability to acquire foods.

EJ-3 Policies

EJ-3.1 **Incentivize Healthy Food Supply**. Encourage retailers to improve the quality and selection of healthy foods and nutritional information and to stock fresh and healthy food at affordable prices by providing incentive programs, technical assistance, or other services.

EJ-3.2 **Access to Healthy Food**. Strive to locate healthy food establishments so that all residences are within walking distance (quarter to a half-mile) of a store with healthy options, where feasible and appropriate.

EJ-3.3 **Options for Healthy Food**. Prioritize healthy food supplies in economic development efforts and encourage the establishment and operation of farmers' markets, farm stands, ethnic markets, mobile health food markets, and convenience/corner stores that sell healthy foods, including fresh produce.

EJ-3.4 **Community Gardens**. Support opportunities for neighborhood-run community gardens including coordination with local school districts and non-profits.

EJ-3.5 **Organic Waste Diversion.** Support policies and programs to divert organic waste from landfills into recycling activities and food recovery organizations that help provide healthy food to the local community.

EJ-3 Actions

EJ-3a Set an example in City facilities and at City-sponsored events by providing healthy food and beverage options.

EJ-3b Encourage local markets, restaurants, and food recovery organizations to donate surplus food to residents in need.

EJ-3c Prepare and distribute information on the benefits of healthy eating and on the availability of food assistance programs.

EJ-3d Encourage local organizations and community groups to provide free or reduced cost lunches after the school year ends.

EJ-3e Encourage and support the establishment of a regular farmer's market in the City.

GOAL EJ-4 SAFE AND SANITARY HOMES

A community with healthy living conditions for all residents, particularly those in Environmental Justice Communities.

The housing conditions of homes in a community have direct health implications for those who live in the homes. Many residents in Environmental Justice Communities live in dwellings that were built before standards and regulations were established to ensure that new homes are free from pollutants such as lead and asbestos. The proportion of older homes in Environmental Justice Communities are usually higher than in non-environmental justice areas and thus residents in Environmental Justice Communities are disproportionately exposed to these health threats. Older housing often has other problems such as poor ventilation, which leads to uncomfortable indoor temperatures and mold-producing moisture, and pest and vermin infestation.

Overcrowded housing is another issue that affects the safety and cleanliness of homes. Overcrowding is typically measured by determining the persons-per-room in a dwelling unit, with more than one person per room considered overcrowded. Housing affordability also influences whether homes in a community are safe and sanitary. When a tenant or homeowner spends more than 30 percent of their income toward housing (including utilities), they are generally considered to be cost-burdened. When a household is cost-burdened, there is less money for housing maintenance or other needs such as healthcare and healthy food. These issues are further discussed and addressed in the Housing Element of this General Plan.

EJ-4 Policies

EJ-4.1 **Code Enforcement**. Focus code enforcement efforts in Environmental Justice Communities to improve unsafe and unsanitary conditions, focusing on overcrowding; parking on lawns; unpermitted garage conversions, additions, and accessory-dwelling units; unpermitted plumbing and electrical; deferred property maintenance, and trash and dumping.

EJ-4.2 **Lead-Based Paint**. Raise awareness about the risks associated with lead-based paint and other housing hazards, including by distributing information about remediation of lead and best practices to reduce and eliminate other housing hazards.

EJ-4.3 **Indoor Air Quality.** Encourage measures to reduce indoor air quality impacts (e.g., air filtration systems, kitchen range hood exhaust fans, low-VOC paint and carpet) for new developments.

EJ-4.4 **Absentee Owner Outreach.** Support the upkeep and maintenance of rental properties throughout the City, including in Environmental Justice Communities.

EJ-4.5 **Tenant Rights**. Distribute information with City newsletters and/or other periodical publications about protecting tenant rights, so they are not penalized for reporting or living in a dwelling unit that does not meet health and safety standards.

EJ-4.6 **Capital Improvements**. Support capital improvements such as sewer, water, street, and electrical improvements that facilitate the provision of safe, decent, and sanitary housing.

EJ-4 Actions

EJ-4a Distribute information about remediation of lead and best practices to reduce and eliminate other housing hazards.

EJ-4b Conduct periodic absentee owner outreach in Environmental Justice Communities to inform owners of their legal requirements to maintain and upkeep their rental properties.

EJ-4c Distribute information with City newsletters and/or other periodical publications about protecting tenant rights, so they are not penalized for reporting or living in a dwelling unit that does not meet health and safety standards.

EJ-4d Apply for funds for housing rehabilitation resources as feasible.

GOAL EJ-5 PHYSICAL ACTIVITY

Land use and development patterns encourage physical activity and improve multimodal access and connectivity to employment, shopping, services, schools, parks, and other destinations.

Physical activity is a large contributor to the physical and mental health of Lawndale residents. Research by Centers for Disease Control and Prevention shows that physically active people tend to live longer and have lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers. Physical activity is promoted by the built environment by providing places that encourage walking, biking, and other forms of exercise. These places include parks, open space, trails, urban green spaces, areas with robust tree canopies, and active transportation networks. An important component of environmental justice is distributing facilities that promote physical activity equitably throughout the community so there are equal opportunities for all residents to be physically active.

EJ-5 Policies

EJ-5.1 **Physical Activity Opportunities.** Prioritize increasing opportunities for physical activity within Environmental Justice Communities.

EJ-5.2 **Eliminate Barriers**. Update the Zoning Ordinance and Hawthorne Boulevard Specific Plan to eliminate any barriers to facilitating the development of complete neighborhoods with access to retail and recreation resources within walking distance of homes.

EJ-5.3 **Accessibility**. Endeavour to provide parks that are easily accessible to the surrounding neighborhood and beyond, and are as barrier-free as possible, particularly for those with limited mobility.

EJ-5.4 **Physical Activity.** Promote physical activity programs and education offered by the City and community partners and encourage residents to regularly participate in physical activity and active lifestyles.

EJ-5.5 **Partnerships**. Form partnerships with non-profit organizations, healthcare organizations, and regional governmental agencies to foster and participate in efforts promoting healthy lifestyles, physical activity, and positive health outcomes.

EJ-5 Actions

EJ-5a Promote programs that encourage walking and/or biking to work and school such as walk-a-thons, marathons, and bike-a-thons.

EJ-5b Coordinate with adjacent jurisdictions to explore options for creating cross-jurisdictional bike lanes.

GOAL EJ-6 CIVIC ENGAGEMENT

Accessible and culturally appropriate opportunities for all people to engage in the decision-making process.

Civic, or community, engagement is an important goal across all local planning and decision-making processes. It can help foster a strong sense of place within a neighborhood and can deepen the investment of stakeholders in working toward neighborhood improvements. Environmental Justice issues will be more effectively identified and resolved if accessible and culturally appropriate opportunities to engage in local decisions are created for low-income, minority, and linguistically isolated stakeholders. Effective civic engagement not only provides the City with an opportunity to strengthen its relationship with the community but provides for sound investment in better decision-making by ensuring decisions are informed by community needs and aspirations.

EJ-6 Policies

EJ-6.1 **Equitable Civic Engagement**. Support an equitable and comprehensive approach to civic engagement and public outreach on all aspects of City governance and delivery of services.

EJ-6.2 **Community Events**. Promote, sponsor, and support a variety of community events to strengthen social cohesion and the overall identity of the City.

EJ-6.3 **City Information**. Distribute City information in Environmental Justice Communities, such as numbers to call for code enforcement, programs offered through the City, housing needs, and general City information.

EJ-6.4 **Partnerships**. Partner with and support the efforts of any community-based organizations or non-profits that focus on programs and activities for the Environmental Justice Communities.

EJ-6.5 **Representation.** Specifically invite residents from traditionally underrepresented demographic groups to become board, commission, and committee members as openings occur.

EJ-6 Actions

EJ-6a Survey community values periodically to encourage more involvement from residents and to determine if the General Plan and other City documents are fulfilling the residents' goals for a desirable and attractive community. The survey should occur every five years.

EJ-6b Promote meaningful cross-cultural participation in local planning and decision-making processes by:

a. Continuing to provide City-sponsored material in multiple languages.

b. Organizing outreach events and conducting surveys directly to specific demographic groups.

c. Partnering with community-based organizations that have relationships, trust, and cultural competency with target communities to conduct outreach for local initiatives and issues.

d. Tailoring activities and the venues where they take place to accommodate the cultural preferences of different racial/ethnic groups.

EJ-6c Make meetings and other public engagement forums accessible to a wide range of residents and encourage greater attendance by:

a. Ensuring any materials are distributed far enough in advance of meetings to allow sufficient time for review and comment.

b. Using communication methods that convey complex or technical information in an easily understandable manner.

c. Facilitating meetings using diverse methods that can engage all participants and can appeal to multiple styles of learning.

d. Focusing on methods to effectively engage younger residents.

GOAL EJ-7 IMPROVEMENTS AND PROGRAMS

Public improvements and programs address the needs of Environmental Justice Communities.

An important component of Environmental Justice is prioritizing projects, programs, and investments that directly serve and benefit residents within areas experiencing higher levels of environmental burdens. Effective prioritization requires coordination and alignment across departments, agencies, and shared jurisdictional partners along with consistent and sustained engagement with community stakeholders. Environmental Justice Communities typically have specific needs that arise from past geographic and procedural inequities. This requires taking targeted actions that will improve existing conditions in these communities. Many of these actions will not be applicable across the entire City but will be applicable only to Environmental Justice Communities due to their special circumstances.

EJ-7 Policies

EJ-7.1 **Prioritize Spending**. Where possible, prioritize spending of funds for air quality and other environmental improvements, public infrastructure improvements, recreation, and community programming in Environmental Justice Communities, and make fiscal decisions based on this priority.

EJ-7.2 **Public Amenities.** Promote the equitable provision of public amenities such as sidewalks, street trees, crosswalks, paving, streetlights, bike lanes, and other amenities as specified in other sections of this Environmental Justice Element.

EJ-7.3 **Coordination.** Coordinate with relevant utility providers to provide adequate and appropriate levels of service and promote the maintenance of water, sewer, stormwater, and electrical facilities serving Environmental Justice Communities.

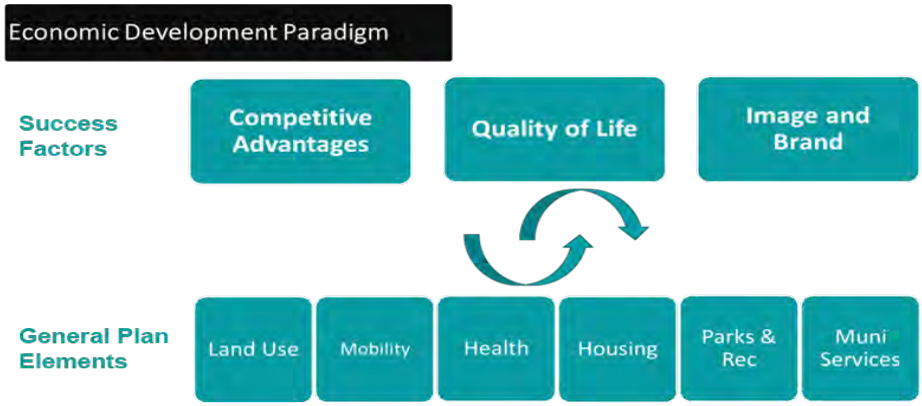
EJ-7 Actions

EJ-7a Seek grants that will specifically help with the issues in Environmental Justice Communities such as safe housing, air quality and environmental concerns, increased tree coverage, recreational resources, and other issues.

EJ-7b Engage with the community to identify desired programs that would benefit targeted segments of the population such as youth, women, and small business owners.

Introduction to Economic Development

The Economic Development Element is intended to guide the City's future policy decisions in service of growing and strengthening the local economy. The Economic Development Element is not a required element for a General Plan, but the City has decided to include it in recognition that promoting economic vibrancy and resiliency is a central aspect of planning for Lawndale's future. While presented as a separate chapter, the policies contained within the Economic Development Element are intertwined with those found in the other Elements of the General Plan. Decisions made around the topics of these other elements, such as land use, housing, mobility, open space, and health and wellness, necessarily impact economic development, and vice-versa.



Organization of Element

Given market conditions and trends in Lawndale and its location in the region, this Element has identified key areas in which the City has the greatest opportunity for economic growth and development. The goals and policies identified in the Economic Development Element are focused on these areas of opportunity and underscore the City's commitment to being a place where workers, residents, visitors, and businesses can thrive, today and into the future. The Element is organized into five topics, as follows:

- Economic Diversification
- Support and Expand Business Community
- Workforce Development and Retention
- Create a Vibrant Hawthorne Boulevard
- Fiscal Sustainability

GOAL ED-1 ECONOMIC DIVERSIFICATION

A City with a strong and diversified economic base that promotes job growth, economic stability, and fiscal sustainability.

A diversified economy makes cities stronger and more resilient in the face of changing economic trends. Businesses in today's economy are highly mobile, and firms consider a variety of factors when deciding where to locate or re-locate. These factors include the ease with which a firm can establish itself and operate in the City, and the level of a city's investment in and responsiveness to its business community. Creating such an environment requires intentional work and coordination from the City. To foster a healthy economic climate, Lawndale should position itself to accommodate and expand on its current strengths. The City can leverage new residential growth to drive the development of retail and office spaces. New hotels can additionally expand opportunities for visitor-serving businesses.

ED-1 Policies

ED-1.1 **Mixed-Use Growth.** Leverage allowed mixed-use growth as a tool for drawing in a greater range of businesses that can take advantage of a growing local labor market and consumer base.

ED-1.2 **Targeted Development**. Encourage the development of multifamily and mixed-use spaces that incorporate office, retail, and residential uses in high-activity/high-traffic corridors and areas.

ED-1.3 **Targeted Business Attraction**. Identify and target outreach to businesses in industries that align with the City's existing industry clusters, land use patterns, and community needs while expanding business attraction to include higher-paying industry sectors.

ED-1.4 **Visitor-Serving Businesses.** Support development of hotels and visitor-serving businesses that leverage the City's proximity to Los Angeles International Airport (LAX) and regional attractions.

ED-1 Actions

ED-1a Create a five-year economic development strategic plan to design, manage, and implement short- and medium-term economic development priorities for the City.

ED-1b Perform a baseline analysis to identify industry niches that are well-suited for the City and periodically update this analysis based on local and regional trends.

ED-1c Identify market surpluses and leakages in the City's local economy to better understand which industries are present and/or absent compared to peer cities and to inform targeted business attraction activities.

ED-1d Identify vacant, underdeveloped, or underutilized sites and buildings in targeted corridors that represent redevelopment opportunity, and improve their redevelopment potential by engaging with and educating property owners, finding strategic opportunities for parcel consolidation, and facilitating investor "matchmaking" through a public online inventory and other efforts.

ED-1e Coordinate with neighboring cities and regional partners to host regional events and trade shows to broaden the City's visibility and promote local visitor-serving businesses.

ED-1f Explore public-private partnerships and/or catalytic development projects to anchor and spur growth that builds on the City's economic, physical, and cultural assets.

GOAL ED-2 SUPPORT AND EXPAND THE BUSINESS COMMUNITY

A community that supports, collaborates with, and fosters local business development.

One of the City's most important assets in promoting economic growth is its existing economic base. Supporting existing local businesses so that they can thrive, grow, and adapt to changing economic conditions will not only help those businesses and their employees, but also demonstrate to investors that the City is a desirable place to locate to. This support extends to residents, workers, students, and new entrepreneurs who may be looking to establish or grow a business in the City.

ED-2 Policies

ED-2.1 **Support the Existing Business Community**. Help retain and expand existing businesses through supportive and responsive policies and programs.

ED-2.2 **Partnerships.** Create and maintain avenues through which Lawndale's business community, elected officials, City staff, and civic organizations can discuss economic development issues.

ED-2.3 **Marketing.** Market the City's central South Bay location and excellent regional access to attract new businesses and industries.

ED-2.4 **Processes.** Streamline support for local businesses and remove potential barriers to economic development.

ED-2.5 **Resources.** Provide the business community with easily accessible information on available resources for growth and development, including those aimed at entrepreneurship and small businesses.

ED-2.6 **Entrepreneurship.** Educate and support entrepreneurs in establishing and expanding small and local businesses.

ED-2.7 **Infrastructure.** Identify and address infrastructure needs that support commercial development.

ED-2 Actions

ED-2a Meet regularly with representatives of the City's business community, including the Lawndale Chamber of Commerce, to solicit feedback on how to improve the business environment, cement effective relationships, and help businesses overcome challenges.

ED-2b Support collaborative partnerships and networks between and among businesses to create a robust business ecosystem that supports entrepreneurship through reoccurring roundtable events and other platforms that enable flexible participation.

ED-2c Develop and implement a creative marketing plan that attracts new employers to the City.

ED-2d Review and maintain a Development Code that supports investment and innovation in the City.

ED-2e Identify ways to simplify and streamline permitting for new and expanding businesses and implement the changes as feasible.

ED-2f Use local revenue sources as well as State and Federal grants and other financing tools to fund capital improvements and the redevelopment of targeted commercial areas.

ED-2g Maintain and regularly update the City's public-facing sources of information on economic development resources, including webpages, social media, and other platforms to offer accessible and up-to-date information for the business community.

GOAL ED-3 WORKFORCE DEVELOPMENT AND RETENTION

A City that invests in the economic success of its community and people.

The presence of a workforce aligned with the needs of the local economy, particularly growth sectors, is a major component in business retention and expansion. City residents are primarily employed in some of the region's lowest-paying industries, with a small proportion working in higher-paying industries such as finance and insurance, information, and professional/scientific/technical services. In addition to diversifying the local job base, the City should look to enhance education and workforce development opportunities for residents. In doing so, the City can improve residents' social mobility while bolstering its economic vibrancy. Aligning the resident workforce's skills with the needs of the businesses of today and tomorrow will have a critical impact on expansion and diversification of the City's economy.

ED-3 Policies

ED-3.1 **Workforce as an Economic Driver**. Pursue strategies and programs for enhancing education and workforce skills aligned with local industries targeted for retention, expansion, and attraction.

ED-3.2 **Workforce as Social Mobility.** Promote training, education, and labor support programs that enhance the City's labor force, assist residents in obtaining new employment opportunities, and grow median incomes.

ED-3.3 **Housing Choices**. Develop land use policies that facilitate development of housing affordable to a range of household types and incomes, to help diversify the local labor force and promote long-term stable residency.

ED-3 Actions

ED-3a Partner with regional education institutions and local secondary schools to strengthen the workforce pipeline.

ED-3b Develop and implement strategies to attract higher-paying industries to locate in the City, including outreach to targeted businesses and industry organizations, and investment in infrastructure and branding of major commercial centers such as the Hawthorne Boulevard corridor.

ED-3c Convene major local and regional employers to solicit guidance on how the City can support partnerships and develop policies and programs to create a strong workforce pipeline.

GOAL ED-4 CREATE A VIBRANT HAWTHORNE BOULEVARD

A community with a successful corridor for commerce, mixed-use development, and social activity.

Major commercial activity corridors have the potential to drive economic diversification, anchor business activity, and generally open the City to increased economic opportunity. By enhancing the City's primary commercial corridor along Hawthorne Boulevard, Lawndale can promote economic activity that serves the needs of residents, workers, and visitors. Enabling more intense development of mixed-use spaces along the Corridor and investing in the Corridor's businesses, marketing, and infrastructure can generate employment and daytime activity that can support a wide range of businesses with an established customer base. These opportunities in turn will enhance the City's overall economic base and prospects.

ED-4 Policies

ED-4.1 **Intensification**. Promote mixed-use development along Hawthorne Boulevard that will attract visitors from across the region, support the local needs of residents, and build a sense of place.

ED-4.2 **Streetscape Improvements.** Enhance aesthetics and "curb appeal" of the Hawthorne corridor with strategic investments such as landscaping, outdoor lighting, wayfinding, entry and building façade improvements, and other initiatives that increase its attractiveness for businesses and consumers.

ED-4.3 **Accessibility.** Enhance City and regional connectivity by supporting multimodal transportation options along Hawthorne Boulevard and other major City thoroughfares.

ED-4.4 **Branding Strategy**. Create and cultivate a distinctive Lawndale/Hawthorne Boulevard brand that attracts investors and update it periodically.

ED-4 Actions

ED-4a Encourage development of mixed-use spaces in high-activity areas and corridors through zoning changes and incentive programs (e.g., density bonuses and other concessions).

ED-4b Implement strategies and actions in the Housing Element that promote the development of diverse housing options in targeted areas along the Corridor to enhance economic activity and accessibility for residents.

ED-4c Implement strategies and actions in the Mobility Element and the Hawthorne Specific Boulevard Plan that promote infrastructure improvements and land use policies that will enhance economic activity and accessibility.

ED-4d Pursue funding from Local, State, and Federal sources to support storefront and streetscape improvements.

ED-4e Conduct and implement a branding study that is consistent with and reinforces the marketing efforts, streetscape improvements, and other initiatives described herein.

GOAL ED-5 FISCAL SUSTAINABILITY

A City that pursues fiscal sustainability through sound financial management and balanced growth.

The fiscal health of the City is dependent on long-term sustainability of the City's finances and operations, measured by the City's revenues, spending per capita, and its ability to provide services. Each of these in turn effect the ability of the City to plan, manage, and pay for public services and investments, including many of the economic development initiatives described herein. A diverse set of revenue sources helps protect a city's budget in downturns in revenue-generating activities. Lawndale, like most cities in California, relies on a handful of revenues sources—such as property, sales, and transient occupancy taxes—to fund day-to-day municipal operations. Enabling further development and attracting a range of real estate development and business types will prevent the City from becoming overly dependent on any one sector of the market and economy. Simultaneously, new residential development and new residents will require additional costs related to city services and infrastructure, and the City will need to plan for these needs through strong financial management and fiscal policies.

ED-5 Policies

ED-5.1 **Revenue Sources.** Consider opportunities to expand municipal revenue sources that diversify the City's tax base, particularly those that can support infrastructure needs for future growth.

ED-5.2 **Impacts of New Development.** Pursue strategies that ensure new development adequately and fairly mitigates its impacts on City infrastructure and service costs.

ED-5.3 **Retail Support.** Promote additional retail development to increase sales tax revenues and expand retail amenities available to residents, employers, and visitors.

ED-5.4 **Hotels.** Encourage the development of new hotels to serve the regional visitor population and generate additional transient occupancy tax.

ED-5.5 **Funding.** Pursue a range of public, private, and non-profit funding sources to fund community revitalization and economic development activities.

ED-5.6 **Cost Control**. Carefully manage City costs through judicious expansion of municipal services and infrastructure.

ED-5 Actions

ED-5a Assess peer cities tax and fee structures and rates to evaluate Lawndale's own structure and revise tax and fee structures as appropriate.

ED-5b Identify the estimated costs and potential funding sources for each proposed Capital Improvement Plan project.

ED-5c Support new retail development by maintaining mixed-use zoning at strategic nodes as allowed by the Land Use Element and Hawthorne Boulevard Specific Plan, supporting the chamber of commerce and other business associations, facilitating community engagement with property owners, and developing retail-specific marketing strategies.

ED-5d Support development of new hotel and visitor-serving establishments by developing tourism marketing initiatives, coordinating with hospitality industry representatives, and ensuring access to developable land aligned with appropriate zoning regulations.

ED-5e Require analysis of fiscal implications of new development and request fiscal mitigations as needed to ensure adequate public service levels can be provided over the long term.

ED-5f Continue to investigate and pursue revenue sources, such as state and federal funding programs, that do not add to the tax burden of residents or local businesses.

Introduction to Community Facilities

The City and various local utilities, agencies, and districts provide a range of community services and facilities that are integral to providing a high quality of life for Lawndale's residents. The future public facility and infrastructure needs of new projects must be carefully considered when evaluating new opportunities for growth to ensure that existing residents and businesses continue to receive adequate services and new developments have the necessary facilities and infrastructure to support long-term viability.

While not specifically required by State law for inclusion in the General Plan, this Community Services and Facilities Element is a critical component in meeting the infrastructure and public services needs of Lawndale. This Element works collaboratively with the topics addressed in all other General Plan Elements, specifically the City's Land Use, Resource Management, Public Safety, and Environmental Justice Elements.

Organization of Element

The Community Services and Facilities Element will address each of the topics below as they relate to Lawndale. The goals and policies of this element are organized around the following topics:

- Infrastructure and Public Services
- Water System
- Wastewater System
- Stormwater Management
- Telecommunications
- Health and Human Resources

GOAL CF-1 INFRASTRUCTURE AND PUBLIC SERVICES

A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

A number of public and private agencies provide essential public goods and services to Lawndale. Infrastructure provides the physical and organizational means of production and distribution for essential services required for community function. The City actively plans for the provision and financing of infrastructure and public services to maintain quality of life.

CF-1 Policies

CF-1.1 **Capital Improvements**. Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

CF-1.2 **Fair Share**. Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

CF-1.3 **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

CF-1.4 **Revenue Sources**. Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

CF-1.5 **Infrastructure Rehabilitation**. Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

CF-1.6 **Preventive Street Maintenance.** Maintain and improve streets, sidewalks, and other public rights-of-way to provide a reliable network for circulation through a proactive preventive maintenance program.

CF-1.7 **Facility Sharing**. Promote the clustering of public and quasi-public facilities (e.g., schools, parks, activity centers, etc.), the joint use of facilities, and agreements for sharing costs and operational responsibilities among users.

CF-1.8 **Regional Issues**. Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

CF-1.9 **Cost Sharing**. Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

CF-1.10 **Regional Services Providers**. Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

CF-1.11 **Capital Improvement Planning**. Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

CF-1.12 **Undergrounding of Facilities.** Continue to require that all new utility lines are installed underground where feasible and promote the undergrounding of existing overhead facilities, including poles and lines.

CF-1 Actions

CF-1a Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

CF-1b Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

CF-1c Study mechanisms for funding and phasing of new infrastructure.

CF-1d Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

CF-1e Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

CF-1f Require the undergrounding of utility lines in new development, and as areas are redeveloped, except where infeasible for operational reasons.

GOAL CF-2 WATER SYSTEM

A community with a safe and reliable water supply, storage, and distribution system to meet the needs of existing and future users.

The City is served by the Golden State Water Company (an investor-owned public utility company) Southwest System. The City is underlain by potable and non-potable water infrastructure owned and maintained by GSWC and West Basin Municipal Water District (WBMWD), respectively. Golden State Water Company's potable water supplies consist of groundwater pumped from the West Coast Basin and Central Basin groundwater systems and imported water purchased from Central Basin Municipal Water District and the West Basin Municipal Water District.

CF-2 Policies

CF-2.1 **Water Supply Needs**. Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

CF-2.2 **Use of Recycled Water**. Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

CF-2.3 **Climate Change Impacts.** Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

CF-2.4 **Drought Planning**. Support the implementation of drought contingency plans to support the availability of adequate water during drought, including emergency water connections and related measures.

CF-2 Actions

CF-2a Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

CF-2b Work with water districts to expedite the improvement and expansion of water and reclaimed water facilities when necessary.

CF-2c In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

GOAL CF-3 WASTEWATER SYSTEM

A community with a well-maintained wastewater system that properly disposes of waste and safely transports it to regional facilities.

Wastewater management systems protect public health and the environment by collecting and treating municipal wastewater (sewage). Wastewater generated in Lawndale is conveyed via local and regional infrastructure to the Los Angeles County Sanitation Districts' treatment facilities. Sewer collection system infrastructure serving the City is owned and maintained by three separate entities: the City, Los Angeles County Department of Public Works (LACDPW), and the Los Angeles County Sanitation Districts (LACSD).

CF-3 Policies

CF-3.1 **Wastewater System**. Work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

CF-3.2 **Adequate Infrastructure**. Coordinate with the County of Los Angeles Consolidated Sewer Maintenance District to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained.

CF-3.3 **Integrated Systems Planning**. Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

CF-3.4 **Statewide Requirements**. Comply with current Statewide General Waste Discharge requirements concerning the operation and maintenance of the City's wastewater collection system.

CF-3 Actions

CF-3a Through the development review process, continue to cooperate with the County of Los Angeles Consolidated Sewer Maintenance District to ensure adequate wastewater facilities are provided and maintained in the community. Specifically, the City should:

- Require that sufficient wastewater infrastructure capacity is available to serve the development prior to approval of the project;
- Ensure the project applicant has paid the required fees prior to occupancy of any new development; and
- Periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities.

CF-3b Work with the County of Los Angeles Consolidated Sewer Maintenance District to expedite the improvement and expansion of sewer facilities when necessary.

CF-3c Develop a Citywide Sewer Facilities Master Plan to identify existing and future wastewater treatment needs, implement needed improvements, and identify potential funding sources, as funding is available.

GOAL CF-4 STORMWATER MANAGEMENT

A community with an efficient, well-maintained stormwater management system that protects from flooding and enhances water quality.

Storm drains convey excess water from rain and outdoor water uses away from urban areas. As urban areas have less vegetation and more impervious surfaces, less water is able to infiltrate into the ground, and more runoff is generated. Lawndale supports an integrated stormwater management approach that includes storm drains and Low Impact Development (LID) measures designed to mitigate the increase in runoff volumes and velocities to downstream areas to prevent flooding and protect downstream areas from water pollution. The City of Lawndale is responsible for managing the public storm drain system within Lawndale's limits and ensuring that an adequate level of service is provided to protect the public from excessive surface flooding conditions. Los Angeles County Flood Control District (LACFCD) infrastructure conveys stormwater out of City limits via its regional infrastructure systems.

CF-4 Policies

CF-4.1 **Maintain Capacity.** Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

CF-4.2 **Stormwater Runoff**. Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

CF-4.3 **Stormwater Treatments**. Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

CF-4.4 **National Programs**. Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

CF-4 Actions

CF-4a Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

CF-4b Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

CF-4c Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

CF-4d Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

CF-4e Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

GOAL CF-5 TELECOMMUNICATIONS

A community with an efficient and reliable telecommunications system that improves economic development and equitable access.

The telecommunications system involves technologies that allow for the exchange of information over long distances, such as telephone, television, and internet. Lawndale is proactive in its plans to ensure fast and reliable telecommunications services for all.

CF-5 Policies

CF-5.1 **Cooperation with Utilities Providers.** Work cooperatively with utility providers to promote the provision of adequate telecommunications services and facilities to serve the needs of existing and future residents and businesses.

CF-5.2 **Service.** Support telecommunications providers that provide efficient, reliable, affordable, and state-of-the-art service.

CF-5.3 **Future Technologies**. Proactively explore the viability of new communication technologies for their relevancy and implementation in Lawndale.

CF-5.4 **Access for All.** Encourage the installation of public use wireless broadband access points throughout Lawndale.

CF-5.5 **Appropriate Siting and Design.** Coordinate with service providers in the siting and design of telecommunication facilities to minimize environmental, aesthetic, and safety impacts.

CF-5.6 **Co-location of Facilities**. Encourage the co-location of telecommunications facilities between different services and providers, when feasible.

CF-5.7 **Undergrounding of Facilities.** Continue to require that all new telecommunication lines are installed underground where feasible and promote the undergrounding of existing overhead facilities.

CF-5 Actions

CF-5a Confer with telecommunications providers regarding major development plans and participate in the planning of the extension of utilities.

CF-5b Require the undergrounding of telecommunication lines in new development, and as areas are redeveloped, except where infeasible for operational reasons.

CF-5c Periodically review and revise existing City ordinances regulating the placement, maintenance, and operation of telecommunication facilities.

GOAL CF-6 HEALTH AND HUMAN RESOURCES

A community that enhances the quality of life for all its residents through the provision of health and educational resources including quality schools, libraries, medical, and other community services and facilities.

Education and medical services are important for every stage of life. Lawndale supports the provision of high-quality human services that enhance the health and well-being of all. Lawndale is a proud community with strong support for public schools. Primary education (grades kindergarten through 12) in the Planning Area is provided mainly by two school districts – Lawndale Elementary School District (LESD) and Centinela Valley Union High School District (CVUHSD). The City is also served by the Lawndale Library, which is part of the Los Angeles County Library system.

CF-6 Policies

CF-6.1 **Education and Learning.** Continue to encourage the maintenance of high-quality schools and diverse educational opportunities in Lawndale.

CF-6.2 **Lifelong Learning.** Proactively cooperate with the Lawndale Elementary School District and Centinela Valley Union High School District to encourage the provision of lifelong learning opportunities for persons living and working in Lawndale.

CF-6.3 **School Facilities.** Work with developers and the school districts to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population.

CF-6.4 **Early Childhood Development**. Encourage community organizations and schools to provide expanded opportunities for early childhood care (0–5 years) and development.

CF-6.5 **Occupational Training**. Partner with regional occupational boards and local educational institutions to implement career pathway and job training programs for youth and adults.

CF-6.6 **Libraries**. Work closely with the Los Angeles County Library system to provide library facilities and services necessary to meet the needs of all segments of the community.

CF-6.7 **Senior Services**. Provide facilities, programs, and services for seniors to participate in opportunities for physical activity, social interaction, and mental stimulation.

CF-6.8 **Health Care Services.** Work with neighboring jurisdictions and service providers to provide high-quality health care services to Lawndale residents.

CF-6 Actions

CF-6a Continue to work with the school districts to ensure adequate school facilities are provided and maintained in the community. Specifically, the City should:

- During the processing of residential and non-residential development proposals, ensure the school districts are consulted regarding the potential impact of the project on educational services and facilities. When proposed developments cannot be served by existing facilities and services, the City shall work with the developer and the school district in exploring options for service provision and facility funding.
- Prior to approving a project that is likely to generate students, require the applicant to mitigate school impacts to the full extent permitted by State law through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.
- Cooperate with school districts to update population projections, student generation formulas, potential school sites, and facilities improvement plans.

CF-6b Continue to work with the Los Angeles County Library system to ensure that library development keeps pace with overall City development and population growth.

CF-6c Continue to support the provision of low- or no-cost community services to seniors and special-needs communities, including but not limited to, senior health and wellness programs, meal and emergency food assistance programs, and senior transit programs, as funding is available.

CF-6d Explore feasibility of partnering with local schools, the Lawndale Chamber of Commerce, and local community colleges to coordinate educational support programs and services offered to Lawndale residents.

CF-6e Explore opportunities to use the Lawndale Community Center to provide low- or no-cost health and educational resources accessible to every resident.

CF-6f Partner with churches and other local organizations to provide additional youth and senior programs and services.

Attachment E

Final Environmental Impact Report (EIR)

FINAL

ENVIRONMENTAL IMPACT REPORT

FOR THE

LAWNDALE GENERAL PLAN UPDATE

(SCH: 2022120088)

OCTOBER 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

FINAL
ENVIRONMENTAL IMPACT REPORT

FOR THE

LAWNDALE GENERAL PLAN UPDATE
(SCH: 2022120088)

OCTOBER 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260
JChavez@lawndalecity.org
310-973-3206

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

Chapter Page Number

1.0 Introduction 1-1

1.1 Purpose and Intended Uses of the EIR 1-1

1.2 Environmental Review Process 1-2

1.3 Organization of the Final EIR 1-4

2.0 Comments on Draft EIR and Responses 2-1

2.1 Introduction 2-1

2.2 List of Commenters 2-1

2.3 Comments and Responses 2-1

This page intentionally left blank.

1.0 INTRODUCTION

This Final Environmental Impact Report (Final EIR or FEIR) was prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines (Section 15132). The City of Lawndale is the lead agency for the environmental review of the City of Lawndale General Plan Update (General Plan, General Plan Update, or Project) and has the principal responsibility for approving the Project. This Final EIR assesses the expected environmental impacts resulting from approval and adoption of the General Plan Update and responds to comments received on the Draft EIR.

The Lawndale General Plan is the overarching policy document that guides land use, housing, transportation, open space, public safety, community services, and other policy decisions throughout the City of Lawndale and the Sphere of Influence (collectively referred to as the Planning Area). The General Plan includes the eight elements mandated by State law, to the extent that they are relevant locally, including: land use, circulation, housing, conservation, open space, noise, environmental justice, and safety elements. The City has chosen to combine the topics of Conservation and Open Space into one Element: Resource Management. The topic of Noise is included in the Public Safety Element. General plans must also address the topics of climate change and resiliency planning, either as separate elements or as part of other required elements. At the discretion of each jurisdiction, the general plan may combine these elements and may add optional elements relevant to the physical features of the jurisdiction. The City may also address other topics of interest; this General Plan includes elements related to Economic Development and Community Facilities. The General Plan Update sets out the goals, policies, and actions in each of these areas, serves as a policy guide for how the City will make key planning decisions in the future, and guides how the City will interact with the broader Los Angeles County, surrounding cities, and other local, regional, State, and Federal agencies.

The General Plan Update contains the goals and policies that will guide future decisions within the Planning Area. It also identifies implementation programs, in the form of actions, that will ensure the goals and policies in the General Plan Update are carried out. As part of the General Plan Update, the City and the consultant team prepared several support documents that serve as the building blocks for the General Plan Update and analyze the environmental impacts associated with implementing the General Plan Update.

Refer to Section 3.0, *Project Description* of the Draft EIR for a more comprehensive description of the details of the proposed Project.

1.1 PURPOSE AND INTENDED USES OF THE EIR

CEQA REQUIREMENTS FOR A FINAL EIR

This Final EIR for the Lawndale General Plan Update has been prepared in accordance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines. State CEQA Guidelines Section 15132 requires that a Final EIR consist of the following:

- The Draft Environmental Impact Report (Draft EIR) or a revision of the draft;
- Comments and recommendations received on the Draft EIR, either verbatim or in summary;

- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The responses of the lead agency to significant environmental concerns raised in the review and consultation process; and
- Any other information added by the lead agency.

In accordance with State CEQA Guidelines Section 15132(a), the Draft EIR is incorporated by reference into this Final EIR.

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed projects, and obligates them to balance a variety of public objectives, including economic, environmental, and social factors.

PURPOSE AND USE

The City of Lawndale, as the lead agency, has prepared this EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the General Plan Update and subsequent implementation of projects consistent with the General Plan Update. The environmental review process enables interested parties to evaluate the proposed Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the General Plan Update. This EIR may also be used by other agencies within Los Angeles County. Responsible and trustee agencies that may use the EIR are identified in Section 2.0, *Introduction and Purpose* of the Draft EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City of Lawndale circulated a Notice of Preparation (NOP) of an EIR for the Project on December 6, 2022 to trustee and responsible agencies, the State Clearinghouse, and the public. A scoping meeting was held on December 15, 2022 at 6:30 p.m. at the Harold E. Hofmann Community Center located at 14700 Burin Avenue in the City of Lawndale. No public or agency comments on the NOP related to the EIR analysis were presented or submitted during the scoping meeting. During the 30-day public review period for the NOP, which ended on January 5, 2023, four written comment letters were received on the NOP. A summary of the NOP comments is provided in Section 2.8 of the Draft EIR. The NOP and all comments received on the NOP are presented in Appendix A of the Draft EIR.

NOTICE OF AVAILABILITY AND DRAFT EIR

The City of Lawndale published a public Notice of Availability (NOA) for the Draft EIR on August 15, 2023, inviting comment from the general public, agencies, organizations, and other interested parties. The NOA was filed with the State Clearinghouse (SCH# 2022120088) and was published in the *Daily Breeze* pursuant to the public noticing requirements of CEQA. The Draft EIR was available for public review from August 15, 2023 through October 2, 2023. The Public Draft General Plan Update was also available for public review and comment during this time period.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of the Project's direct and indirect impacts on the environment and General Plan policies and actions to reduce impacts to the extent feasible, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in the Draft EIR.

RESPONSE TO COMMENTS/FINAL EIR

The City of Lawndale received seven comment letters regarding the Draft General Plan and Draft EIR from public agencies, organizations, and members of the public during the 45-day review period.

In accordance with CEQA Guidelines Section 15088, this Final EIR responds to the written comments received on the Draft EIR. This document and the Draft EIR, as amended herein, constitute the Final EIR.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The Lawndale City Council will review and consider the Final EIR. If the City Council finds that the Final EIR is "adequate and complete," then it may certify it in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

1) The EIR shows a good faith effort at full disclosure of environmental information; and
2) The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

Upon review and consideration of the Final EIR, the Lawndale City Council may take action to approve, revise, or reject the Project. A decision to approve the Lawndale General Plan Update, for which this EIR identifies significant environmental effects, must be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093.

Policies and actions to mitigate potential environmental impacts have been incorporated into the Project, to the extent feasible. No additional mitigation is feasible or available, as described in Sections 5.1 through 6.0 of the Draft EIR. The annual report on general plan status required pursuant to the Government Code will serve as the monitoring and reporting program for the Project.

1.3 ORGANIZATION OF THE FINAL EIR

This Final EIR has been prepared consistent with Section 15132 of the State CEQA Guidelines, which identifies the content requirements for Final EIRs. This Final EIR is organized in the following manner:

SECTION 1.0 – INTRODUCTION

Section 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead agency, summarizes the process associated with preparation and certification of an EIR, and identifies the content requirements and organization of the Final EIR.

SECTION 2.0 – COMMENTS ON DRAFT EIR AND RESPONSES

Section 2.0 provides a list of commenters, copies of written comments made on the Draft EIR (coded for reference), and responses to those written comments

2.0 COMMENTS ON DRAFT EIR AND RESPONSES

2.1 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15088, the City of Lawndale, as the lead agency, has evaluated the comments received on the Public Review Draft Lawndale General Plan Update Environmental Impact Report (Draft EIR) (State Clearinghouse No. 2022120088).

CEQA Guidelines Section 15088.5 states that: *New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.*

Section 2.0 of this Final EIR include information that has been added to the EIR since the close of the public review period in the form of responses to comments and/or errata. As noted below, no new significant information was provided on the Draft EIR during the comment period.

2.2 LIST OF COMMENTERS

Table 2-1 lists the comments on the Draft EIR that were submitted to the City during the 45-day public review period. The assigned comment letter, letter author, affiliation, if presented in the comment letter or if representing a public agency, and letter date are also listed.

Table 2-1
List of Commenters

Response Letter	Individual or Signatory	Affiliation	Date
A	rh@jyrq.com	N/A	8/21/2023
B	Andrew Salas	Gabrieleno Band of Mission Indians – Kizh Nation	8/22/2023
C	Constantin Raether	California Governor's Office of Emergency Services	8/23/2023
D	Sahar Ghadimi	South Coast Air Quality Management District	8/25/2023
E	Ronald M. Durbin	County of Los Angeles Fire Department	9/1/2023
F	Andrew Salas	Gabrieleno Band of Mission Indians – Kizh Nation	9/28/2023
G	Miya Edmonson	State of California Department of Transportation	9/29/2023

2.3 COMMENTS AND RESPONSES

REQUIREMENTS FOR RESPONDING TO COMMENTS ON A DRAFT EIR

CEQA Guidelines Section 15088 requires that lead agencies evaluate and respond to all comments on the Draft EIR that regard an environmental issue. The written response must address the significant environmental issue raised and be detailed, especially when specific comments or suggestions (e.g.,

additional mitigation measures) are not accepted. In addition, the written response must be a good faith and reasoned analysis. However, lead agencies only need to respond to significant environmental issues associated with the project and do not need to provide all the information requested by the commenter, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204(a)).

CEQA Guidelines Section 15204 recommends that commenters provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible environmental impacts of the project and ways to avoid or mitigate the significant effects of the project, and that commenters provide evidence supporting their comments. Pursuant to CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

CEQA Guidelines Section 15088 also recommends that revisions to the Draft EIR be noted as a revision in the Draft EIR or as a separate section of the Final EIR.

RESPONSES TO COMMENT LETTERS

Written comments on the Draft EIR are reproduced on the following pages, along with responses to those comments. To assist in referencing comments and responses, the following coding system is used:

a) Each comment letter is lettered (i.e., Letter A), each comment within each letter is numbered (i.e., A-1, A-2, etc.), and each response is numbered correspondingly (i.e., A-1, A-2, etc.).

Comment Letter A

From: Jared Chavez
To: Ashley Brodkin
Subject: FW: City of Lawndale General Plan Update: Notice of Availability of a Draft EIR
Date: Wednesday, September 13, 2023 10:24:35 AM

Here is one

Ms. Jared Chavez, Community Development Manager
City of Lawndale, Community Development Department
14717 Burin Avenue, Lawndale, CA 90260
Phone: (310) 973-3231/ Fax: (310) 970-2183
jchavez@lawndalecity.org / lawndalecity.org

From: rh@jyrq.com <rh@jyrq.com>
Sent: Tuesday, August 29, 2023 1:04 PM
To: Jared Chavez <jchavez@lawndalecity.org>
Cc: Adrian Gutierrez <AGutierrez@lawndalecity.org>; Jose Hernandez <JHernandez@lawndalecity.org>
Subject: RE: City of Lawndale General Plan Update: Notice of Availability of a Draft EIR

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks!

------- Original Message -------
On Tuesday, August 29th, 2023 at 12:16, Jared Chavez <jchavez@lawndalecity.org> wrote:

> Hi yes you can look at it with this link :
>
> General Plan - City of Lawndale, CA (lawndalecity.org)
>
> Thank you
>
> *Ms. Jared Chavez, Community Development Manager*
> *City of Lawndale, Community Development Department*
> *14717 Burin Avenue, Lawndale, CA 90260*
> *Phone: (310) 973-3231/ Fax: (310) 970-2183*
> *jchavez@lawndalecity.org / lawndalecity.org*
>
> **From:** rh@jyrq.com <rh@jyrq.com>
> **Sent:** Monday, August 21, 2023 12:53 PM
> **To:** Jared Chavez <jchavez@lawndalecity.org>
> **Subject:** Re: City of Lawndale General Plan Update: Notice of Availability of a Draft EIR

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

A-1

Jared, could you please email me a copy of this document?

Thanks!

------- Original Message -------

On Tuesday, August 15th, 2023 at 07:20, abrodkin@denovoplanning.com <abrodkin@denovoplanning.com> wrote:

> The City of Lawndale (City) is preparing a comprehensive update to its existing General Plan. The City of Lawndale has prepared an Environmental Impact Report (EIR) for the City of Lawndale General Plan Update (Project) to address the environmental impacts associated with the Project at a programmatic level. The proposed Project is a long-term plan consisting of policies that will guide future development activities and City actions. No specific development projects are proposed as part of this General Plan Update. However, the Program EIR can serve to streamline environmental review of future projects.
>
> Members of the public and other interested agencies and individuals are invited to provide comments on the Lawndale General Plan Update and Draft EIR. Comments on the Lawndale General Plan Update and the Draft EIR can be provided in writing to the City at the address below, or by email to Jared Chavez, Community Development Manager at jchavez@lawndalecity.org, during the 45-day public review period, starting on **August 2, 2023 and ending on October 2, 2023**. Comments in response to this notice must be submitted to the address below, or by email by the close of the Draft EIR public review period, which is 6:00 PM on Monday, October 2, 2023:
>
> Jared Chavez - Community Development Manager
> City of Lawndale
> 14717 Burin Ave.
> Lawndale, CA 90260
> Email: **jchavez@lawndalecity.org**
>
> Regards,
>
> **Ashley Brodkin** | Senior Planner
> De Novo Planning Group | www.denovoplanning.com
> abrodkin@denovoplanning.com | 714-440-0273
> **Southern California** | 180 East Main St #108 | Tustin, CA 92780
> **Northern California** | 1020 Suncast Ln #106 | El Dorado Hills, CA 95762

Response to Comment Letter A

rh@jyrq.com
N/A
August 21, 2023

A-1 The comment requests a copy of the Draft EIR. The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

Comment Letter B

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the aboriginal tribe of the Los Angeles basin

August 22, 2022

Project Name: City of Lawndale General Plan

Thank you for your letter dated August 15, 2023. Regarding the project above. This is to concur that we agree with the General Plan Amendment. However, our Tribal government would like to request consultation for all future projects within this location. **B-1**

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Dr. Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

Response to Comment Letter B

Andrew Salas
Gabrieleno Band of Mission Indians – Kizh Nation
August 22, 2023

B-1 The comment indicates that the Gabrieleno Band of Mission Indians – Kizh Nation does not have any comments on the Project; however, the Tribal government would like to request consultation for all future projects within the Lawndale General Plan Planning Area. Section 5.18, *Tribal Cultural Resources* of the Draft EIR addresses tribal cultural resources. As stated in Section 5.18 of the Draft EIR, the General Plan includes Policy RM-3.5, which requires consultation with Native American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Future projects within the Planning Area would be required to consult with Tribal Organizations, consistent with State law (i.e., AB 52 and SB 18). The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

Comment Letter C

From: Jared Chavez
To: Ashley Brodkin
Cc: Sean Moore
Subject: Fw: City of Lawndale Safety Element Update
Date: Wednesday, August 23, 2023 1:45:50 PM

Hi Ashley,
Please see the comments from Cal OES below.
Thank you,

Ms. Jared Chavez, Community Development Manager
City of Lawndale, Community Development Department
14717 Burin Avenue, Lawndale, CA 90260
Phone: (310) 973-3231/ Fax: (310) 970-2183
jchavez@lawndalecity.org / lawndalecity.org

From: Raether, Constantin@CalOES <Constantin.Raether@CalOES.ca.gov>
Sent: Wednesday, August 23, 2023 1:04 PM
To: Jared Chavez <jchavez@lawndalecity.org>
Cc: LaMar-Haas, Victoria@CalOES <Victoria.LaMar-Haas@CalOES.ca.gov>; Boemecke, Wendy@CalOES <Wendy.Boemecke@CalOES.ca.gov>; CalOES Mitigation Planning <mitigationplanning@caloes.ca.gov>
Subject: City of Lawndale Safety Element Update

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good day,

The California Governor's Office of Emergency Services (Cal OES) Local Hazard Mitigation Planning Team has taken the time to review the proposed updates/changes to your General Plan. Government Code 65302(g)(8) states "before preparing or revising its Safety Element, each city and county shall consult…. the Office of Emergency Services for the purpose of including information known by and available to the department."

The Cal OES Local Hazard Mitigation Planning Team reviews and compares your current Safety Element hazards against those listed in your most recent Federal Emergency Management Agency (FEMA) approved Local Hazard Mitigation Plan (LHMP). **C-1**

Our office has reviewed your proposed Safety Element update posted on CEQA.net and found no substantive changes to your hazard profiles when compared against your most recent FEMA approved LHMP. Our office has no further comments at this time. **C-2**

Should you need further assistance or have questions please email our team at mitigationplanning@caloes.ca.gov.

Constantin Raether, Environmental Planner
Local Mitigation Planning | Recovery Directorate
California Governor's Office of Emergency Services

Office: (916) 328-7778
Cell: (916) 715-9408
www.caloes.ca.gov/HMGP

Constantin Raether, Environmental Planner
Local Mitigation Planning | Recovery Directorate
California Governor's Office of Emergency Services

Office: (916) 328-7778
Cell: (916) 715-9408
www.caloes.ca.gov/HMGP

Response to Comment Letter C

Constantin Raether
California Governor's Office of Emergency Services
August 23, 2023

C-1 These introductory paragraphs state that the California Governor's Office of Emergency Services (Cal OES) has reviewed the proposed updates to the Lawndale General Plan. The comment references Government Code 65302(g)(8), which states "before preparing or revising its Safety Element, each city and county shall consult…. the Office of Emergency Services for the purpose of including information known by and available to the department." The comment further states that Cal OES reviews and compares Safety Element hazards against those listed in the City's most recent Federal Emergency Management Agency (FEMA) approved Local Hazard Mitigation Plan (LHMP). The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

C-2 The comment indicates that Cal OES has reviewed the City of Lawndale's proposed Safety Element update and found no substantive changes to the City's hazard profiles when compared against the City's most recent FEMA approved LHMP. The comment indicates that Cal OES does not have any comments on the Project. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

Comment Letter D

From: abrodkin@denovoplanning.com
To: sghadimi@aqmd.gov; swang1@aqmd.gov
Cc: "Jared Chavez"
Subject: RE: Technical data request for the City of Lawndale General Plan Update Project.
Date: Monday, August 28, 2023 9:48:32 AM
Attachments: CalEEMod_export_2023-07-12T01_01_16.540Z.json

Good morning,
In response to your request for an electronic copy of any live modeling and emission calculation files, please find attached the requested files for your review of the Lawndale General Plan Update EIR. The attached .jason file is the CalEEMod model file (for the latest version of CalEEMod, 2022.1).

Please let me know if you need any additional information for your review.

Thank you,

Ashley Brodkin | Senior Planner
De Novo Planning Group | www.denovoplanning.com
abrodkin@denovoplanning.com | 714-440-0273
Southern California | 180 East Main St #108 | Tustin, CA 92780
Northern California | 1020 Suncast Ln #106 | El Dorado Hills, CA 95762

From: Jared Chavez <jchavez@lawndalecity.org>
Sent: Friday, August 25, 2023 1:19 PM
To: Ashley Brodkin <abrodkin@denovoplanning.com>
Cc: Sean Moore <SMoore@lawndalecity.org>
Subject: Fw: Technical data request for the City of Lawndale General Plan Update Project.

Hi Ashley please see comment below. They are requesting further documentation.

Ms. Jared Chavez, Community Development Manager

City of Lawndale, Community Development Department

14717 Burin Avenue, Lawndale, CA 90260

Phone: (310) 973-3231/ Fax: (310) 970-2183

jchavez@lawndalecity.org / lawndalecity.org

From: Sahar Ghadimi <sghadimi@aqmd.gov>
Sent: Friday, August 25, 2023 9:44 AM

To: Jared Chavez <jchavez@lawndalecity.org>
Cc: Sam Wang <swang1@aqmd.gov>
Subject: Technical data request for the City of Lawndale General Plan Update Project.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Jared Chavez,

South Coast AQMD staff received the Draft Environmental Impact Report for the City of Lawndale General Plan Update Project (South Coast AQMD Control Number: LAC230823-11). Staff is currently in the process of reviewing the Draft Environmental Impact Report (DEIR). **D-1**

Please provide an electronic copy of any live modeling and emission calculation files (complete files, not summaries) that were used to quantify the air quality impacts from construction and/or operation of the Proposed Project as applicable, including the following: **D-2**

- CalEEMod Dear Phayvanh Nanthavongdouangsy,
  Input Files (.csv files);
- Live EMFAC output files;
- Any emission calculation file(s) (live version of excel file(s); no PDF) used to calculate the Project's emission sources
  (i.e. truck operations).

You may send the above-mentioned files via a Dropbox link in which they may be accessed and downloaded by South Coast AQMD staff by the end of next week. Without all files and supporting documentation, South Coast AQMD staff will be unable to complete a review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.

If you have any questions regarding this request, please contact me.

Thank you.

Sincerely,

Sahar Ghadimi
Air Quality Specialist, CEQA IGR
Planning, Rule Development & Implementation
South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
(909) 396-2392
sghadimi@aqmd.gov

From:	Sahar Ghadimi
To:	abrodkin@denovoplanning.com
Cc:	"Jared Chavez"
Subject:	RE: [EXTERNAL]RE: Technical data request for the City of Lawndale General Plan Update Project.
Date:	Thursday, October 5, 2023 3:34:50 PM

Dear Ashley,
Thank you so much for your email.

After thorough review, we decided we do not need to provide any comment letter for the Lawndale General Plan Update Project.

Sincerely,

D-3

From: abrodkin@denovoplanning.com <abrodkin@denovoplanning.com>
Sent: Thursday, October 5, 2023 10:00 AM
To: Sahar Ghadimi <sghadimi@aqmd.gov>
Cc: 'Jared Chavez' <jchavez@lawndalecity.org>
Subject: [EXTERNAL]RE: Technical data request for the City of Lawndale General Plan Update Project.

Good morning,
The public review period for the Lawndale General Plan Update Project Draft EIR closed on Monday, October 2. The City has begun preparing the Final EIR for the Project. As a commenter on the Project, we are providing you this notice. Please let me know if you have any questions.

Thank you,

Ashley Brodkin | Senior Planner
De Novo Planning Group | www.denovoplanning.com
abrodkin@denovoplanning.com | 714-440-0273
Southern California | 180 East Main St #108 | Tustin, CA 92780
Northern California | 1020 Suncast Ln #106 | El Dorado Hills, CA 95762

From: Jared Chavez <jchavez@lawndalecity.org>
Sent: Wednesday, September 13, 2023 10:31 AM
To: 'Sahar Ghadimi' <sghadimi@aqmd.gov>
Cc: Ashley Brodkin <abrodkin@denovoplanning.com>; Adrian Gutierrez <AGutierrez@lawndalecity.org>
Subject: RE: Technical data request for the City of Lawndale General Plan Update Project.

Good Morning,

We responded on 8/28. See attached email, let me know if you need anything else.
Thank you,

Ms. Jared Chavez, Community Development Manager
City of Lawndale, Community Development Department
14717 Burin Avenue, Lawndale, CA 90260
Phone: (310) 973-3231/ Fax: (310) 970-2183
jchavez@lawndalecity.org / lawndalecity.org

From: Sahar Ghadimi <sghadimi@aqmd.gov>
Sent: Wednesday, September 6, 2023 11:02 AM
To: Jared Chavez <jchavez@lawndalecity.org>
Subject: RE: Technical data request for the City of Lawndale General Plan Update Project.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Jared Chavez,
I hope this email finds you well.
I wanted to follow up on my previous email on providing the technical data for the City of Lawndale General Plan Update Project.

Erly,

From: Sahar Ghadimi
Sent: Friday, August 25, 2023 9:44 AM
To: jchavez@lawndalecity.org
Cc: Sam Wang <swang1@aqmd.gov>
Subject: Technical data request for the City of Lawndale General Plan Update Project.

Dear Jared Chavez,

South Coast AQMD staff received the Draft Environmental Impact Report for the City of Lawndale General Plan Update Project (South Coast AQMD Control Number: LAC230823-11). Staff is currently in the process of reviewing the Draft Environmental Impact Report (DEIR).

Please provide an electronic copy of any live modeling and emission calculation files (complete files, not summaries) that were used to quantify the air quality impacts from construction and/or operation of the Proposed Project as applicable, including the following:

- CalEEMod Dear Phayvanh Nanthavongdouangsy,
  Input Files (.csv files);
- Live EMFAC output files;
- Any emission calculation file(s) (live version of excel file(s); no PDF) used to calculate the Project's emission sources
  (i.e. truck operations).

You may send the above-mentioned files via a Dropbox link in which they may be accessed and downloaded by South Coast AQMD staff by the end of next week. Without all files and supporting documentation, South Coast AQMD staff will be unable to complete a review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.

If you have any questions regarding this request, please contact me.

Thank you.

Sincerely,

Sahar Ghadimi
Air Quality Specialist, CEQA IGR
Planning, Rule Development & Implementation
South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
(909) 396-2392
sghadimi@aqmd.gov

Response to Comment Letter D

Sahar Ghadimi
South Coast Air Quality Management District
August 25, 2023

D-1 This introductory paragraph states that the South Coast Air Quality Management District (AQMD) received and is in the process of reviewing the Draft EIR. The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

D-2 This comment requests an electronic copy of any live modeling and emission calculation files that were used to quantify the air quality impacts from construction and/or operation of the Project. The comment further states that South Coast AQMD staff will be unable to complete a review of the air quality analyses in a timely manner without all files and supporting documentation. The comment is noted. A response to this comment was sent on August 28, 2023 and the requested files were provided to the South Coast AQMD. The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

D-3 This comment states that the AQMD received the requested files and after a thorough review, does not have any comments on the Project. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

Comment Letter E

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

ANTHONY C. MARRONE
FIRE CHIEF
FORESTER & FIRE WARDEN

"Proud Protectors of Life, the Environment, and Property"

BOARD OF SUPERVISORS
JANICE HAHN, CHAIR
FOURTH DISTRICT

HILDA L. SOLIS
FIRST DISTRICT

HOLLY J. MITCHELL
SECOND DISTRICT

LINDSEY P. HORVATH
THIRD DISTRICT

KATHRYN BARGER
FIFTH DISTRICT

September 1, 2023

Jared Chavez
14717 Burin Avenue
Lawndale, CA 90260

Dear Mr. Chavez:

THE DRAFT EIR GENERAL PLAN UPDATE, "CITY OF LAWNDALE GENERAL PLAN UPDATE", PROPOSES TO GUIDE THE CITY'S DEVELOPMENT, GROWTH, AND CONSERVATION THROUGH LAND USE OBJECTIVES AND POLICY GUIDANCE, CITY OF LAWNDALE, FFER2023004404

The Draft EIR General Plan Update reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. **E-1**

The following are their comments:

PLANNING DIVISION:

We have no comments. **E-2**

For any questions regarding this response, please contact Kien Chin, at (323) 881-2404 or Kien.Chin@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

All future development of within the City of Lawndale General Plan boundaries shall comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. **E-3**

When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage.

LAND DEVELOPMENT UNIT:

All future development of within the City of Lawndale General Plan boundaries shall comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.

When involved with subdivision in a city contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage. **E-4**
The County of Los Angeles Fire Department, Land Development Unit appreciates the opportunity to comment on this project. Should any questions arise, you may contact the Land Development Unit at (323) 890-4243.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance **E-5**

The County of Los Angeles Fire Department, Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Matthew Ermino at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time. **E-6**

Please contact HHMD Hazardous Materials Specialist III, Jennifer Levenson at (323) 890-4114 or Jennifer.Levenson@fire.lacounty.gov if you have any questions.

Very truly yours,

RONALD M. DURBIN, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:pg

Response to Comment Letter E

Ronald M. Durbin
County of Los Angeles Fire Department
September 1, 2023

E-1 This introductory paragraph states that the Draft EIR was reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health and Hazardous Materials Division of the County of Los Angeles Fire Department. The comment is introductory in nature and does not contain any information requiring changes to the Draft EIR. No further response is warranted.

E-2 This comment states that the Planning Division of the County of Los Angeles Fire Department does not have any comments on the Project. The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

E-3 These introductory paragraphs state that all future development within the City of Lawndale General Plan boundaries must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. The introductory paragraphs further state that when involved with subdivision in a City contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage. The comment is noted. Section 5.15, *Public Services* of the Draft EIR addresses fire protection and emergency services. As stated in Section 5.15 of the Draft EIR, the General Plan includes policies and actions that require all buildings and facilities in the City to comply with regulatory standards related to fire safety, including the Fire Code. The comment is introductory in nature and does not contain any information requiring changes to the Draft EIR. No further response is warranted.

E-4 This comment repeats the introductory paragraphs referenced above, which state that all future development within the City of Lawndale General Plan boundaries must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants. The introductory paragraphs further state that when involved with subdivision in a City contracting fire protection with the County of Los Angeles Fire Department, Fire Department requirements for access, fire flows and hydrants are addressed during the subdivision tentative map stage. The comment is noted. Section 5.15, *Public Services* of the Draft EIR addresses fire protection and emergency services. As stated in Section 5.15 of the Draft EIR, the General Plan includes policies and actions that require all buildings and facilities in the City to comply with regulatory standards related to fire safety, including the Fire Code. The comment is introductory in nature and does not contain any information requiring changes to the Draft EIR. No further response is warranted.

E-5 This introductory paragraph states that the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, brush clearance, vegetation management, fuel modification for Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. The comment states that the Forestry Division of the County of Los Angeles Fire Department does not

have any comments on the Project. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

E-6 This comment states that the Health Hazardous Materials Division of the County of Los Angeles Fire Department does not have any comments on the Project. The comment does not contain any information requiring changes to the Draft EIR. No further response is warranted.

Comment Letter F

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the aboriginal tribe of the Los Angeles basin

September 28,2023

Project Name: City of Lawndale General Plan Update

Thank you for your letter dated August 15, 2023. Regarding the project above. This is to concur that we agree with the General Plan Amendment. However, our Tribal government would like to request consultation for all future projects within this location. **F-1**

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Dr. Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

Response to Comment Letter F

Andrew Salas
Gabrieleno Band of Mission Indians – Kizh Nation
September 28, 2023

F-1 The comment indicates that the Gabrieleno Band of Mission Indians – Kizh Nation does not have any comments on the Project; however, the Tribal government would like to request consultation for all future projects within the Lawndale General Plan Planning Area. The comment does not contain any information requiring changes to the Draft EIR. Section 5.18, *Tribal Cultural Resources* of the Draft EIR addresses tribal cultural resources. As stated in Section 5.18 of the Draft EIR, the General Plan includes Policy RM-3.5, which requires consultation with Native American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Future projects within the Planning Area would be required to consult with Tribal Organizations, consistent with State law (i.e., AB 52 and SB 18). The comment is noted and no further response is warranted.

Comment Letter G

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life

September 29, 2023

Jared Chavez
Community Development Manager
City of Lawndale
14717 Burin Avenue
Lawndale, CA 90260

RE: City of Lawndale General Plan Update
SCH # 2022120088
Vic. LA-405, LA-107. Citywide
GTS # LA-2022-04292-DEIR

Dear Jared Chavez:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced environmental document. The City of Lawndale is preparing a comprehensive update to its existing General Plan. The General Plan Update is intended to be an expression of the community's vision for the City and Planning Area and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Lawndale General Plan Update includes a comprehensive set of goals, policies, and actions (implementation measures), organized into Elements, as well as a revised Land Use Map. The Lawndale General Plan will include all of the State-mandated elements, and will address two optional topics: Economic Development and Community Facilities. **G-1**

On page 29 of Appendix F Transportation Impact Analysis, it indicates the following:

The OPR recommended thresholds for residential and office land uses as follows:

- Residential: A project exceeding a level of 15% below existing VMT per capita for the city or region may indicate a significant transportation impact.
- Office: A project exceeding a level of 15% below existing regional VMT per employee may indicate a significant transportation impact. **G-2**

On page 35 of Appendix F Transportation Impact Analysis, it indicates the following:

> Project Threshold: a significant impact would occur if the project's 2045 VMT per capita or VMT per employee exceeds 15 percent below the existing Los Angeles countywide average VM per capita, or VMT per employee, respectively.

OPR Technical Advisory states that "**OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold**." A conservative approach to preparing a transportation analysis would result in providing substantial evidence to comply with CEQA. Therefore we recommend the City use lower VMT data, Lawndale 2023 Existing Conditions as a base instead of Los Angeles County 2023 Existing Conditions. **G-2**

The transportation analysis should use the Lawndale 2023 Existing Conditions VMT Per Capita/VMT Per Employee as a base threshold while the City data is available. Therefore with 15% reduction, the reduced threshold should be 8.39 (9.87X85%) for VMT Per Capita and 13.82 (16.26X85%) for VMT Per Employee.

Based revised threshold, the Lawndale 2045 Project condition 9.19 VMT Per Capita and 14.78 VMT Per Employee exceeds the revised threshold above. Therefore, the transportation impact would be significant and mitigation would be required. **G-3**

At this time, the project's impacts related to VMT would be significant and unavoidable because no mitigation is proposed. We would recommend the City to consider the following measures for this General Plan and for all future projects:

1. We encourage the Lead Agency to evaluate the potential of Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) applications in order to better manage the transportation network, as well as transit service and bicycle or pedestrian connectivity improvements. For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). This reference is available online at: **G-4**

   http://ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf

2. For each new development, a post-development VMT analysis to validate and justify Project VMT and future VMT threshold setting should be prepared. Additional mitigation measures should be implemented when the post-development VMT analysis discloses any traffic significant impact. This analysis, which may include interviews with and surveys of project occupants, will provide new traffic data to help validate the City's VMT traffic model results. **G-5**

The collected data can include, among other things, where the trips are coming from, when the trips are taking place, what transportation mode is used, and why those transportation modes were selected. This survey data would be useful 1) to validate existing VMT threshold, 2) to assist in setting future VMT threshold, and 3) to identify suitable TDM to apply as minimization or mitigation measures for the future. These measures could be implemented in the event the post-development VMT analysis discloses any significant traffic impacts. **G-5**

3. Caltrans promotes Smart Growth and recommends the City to balance housing and office developments within the City boundaries. This would be the ultimate approach to reduce VMT. **G-6**

4. VMT Fee Program for all development within the City boundary in which the program has the potential to address transportation funding challenges, promote sustainability, and offer more flexible and equitable approaches to financing and managing transportation systems. Alternatively, the City may consider a new concept of VMT mitigation banks and exchanges. You may learn this new concept from the following link. **G-7**

   https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/research-notes/task3886-rns-5-21-a11y.pdf#:~:text=A%20well%20developed%2C%20carefully%20structured%20VMT%20mitigation%20bank,pay%20for%20VMT%20reductions%20elsewhere%20in%20the%20region.

5. As a reminder for each new development Caltrans has published the VMT-focused Transportation Impact Study Guide (TISG), dated May 20, 2020 and the Caltrans Interim Land Development and Intergovernmental Review (LD-IGR) Safety Review Practitioners Guidance, prepared in On December 18, 2020. You can review those document at the following link: **G-8**

   https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf

   https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-12-22-updated-interim-ldigr-safety-review-guidance-a11y.pdf

6. For future projects any transportation of heavy construction equipment and/or materials that require the use of oversized transport vehicles on State highways will need a Caltrans transportation permit. Any large-size truck trips be limited to off-peak commute periods. **G-9**

If you have any questions, please feel free to contact Mr. Alan Lin the project coordinator at (213) 269-1124 and refer to GTS # LA-2022-04292-DEIR.

Sincerely,

Miya Edmonson

MIYA EDMONSON
LDR/CEQA Branch Chief

email: State Clearinghouse

Response to Comment Letter G

Miya Edmonson
State of California Department of Transportation, District 7
September 29, 2023

G-1 This introductory paragraph summaries the proposed Project. The comment is introductory in nature and does not contain any information requiring changes to the Draft EIR. No further response is warranted.

G-2 This comment summarizes the substantiation of the thresholds used in Appendix F, Transportation Impact Analysis of the Draft EIR, based on the recommend thresholds in the California Office of Planning and Research (OPR) Technical Advisory. The comment states that a conservative approach for preparing a transportation analysis would be for the development of a vehicle miles traveled (VMT) threshold using the City, and not the County of Los Angeles as the geographic area to determine baseline conditions. The comment indicates that if the VMT analysis uses the geographic region of the City for Existing Conditions, the reduced threshold should be 8.39 VMT per capita and 13.82 VMT per employee.

The OPR Technical Advisory recommends that a lead agency may consider the average of the City or region as the geographical area to determine a threshold for residential projects. For office projects, OPR recommends the regional average. Per pages 15 and 16 of the OPR Technical Advisory, the thresholds for residential and office projects are:

- *Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.*

- *Recommended threshold for office projects: A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.*

The use of Los Angeles County as the geographical area to determine the VMT per capita (i.e. regional average) was determined to be appropriate and consistent with the OPR Technical Advisory. The City of Lawndale is part of the larger metropolitan area and the City's size (1.9 square miles), development composition, and location (contiguous to and surrounded by urbanized cities within the County), result in high integration with surrounding communities and the larger region. A significant amount of people that live in Lawndale work outside the City and vice-versa; therefore, many trips originate or end outside the City. Additionally, the use of Los Angeles County as the geographical area to determine VMT is appropriate, since the Project aligns with regional goals. As shown in Table 5.8-5, *Project Consistency with the 2020-2045 RTP/SCS* in the Draft EIR, the Project is consistent with the regional goals in the Southern California Regional Government (SCAG) Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS),

since the Project would allow for infill development in locations near existing transit routes, goods and services. The availability of public transportation and the focus on increasing density relative to the existing public transportation system, enables Project implementation to reduce VMT per service population. Therefore, the use of Los Angeles County as the geographical area to determine VMT thresholds is better aligned with regional goals in the SCAG 2020-2024 RTP/SCS to promote reductions in VMT.

The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-3 The comment from Caltrans states that with the recommended revised threshold the Project conditions VMT per capita and per employee would be significant and mitigation would be required. As discussed under Response G-2, the thresholds used in in Appendix F, Transportation Impact Analysis of the Draft EIR are consistent with the recommendations in OPR's Technical Advisory. Therefore, no revisions to the thresholds would be necessary and no mitigation measures to reduce VMT beyond the reductions identified with the Project are required. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-4 The comment recommends that the Lead Agency evaluate Transportation Demand Management (TDM) strategies and Intelligent Transportation System applications in order to better manage the transportation network, as well as transit service, bicycle, and pedestrian connectivity improvements. As discussed in Section 5.17, *Transportation* in the Draft EIR, the Mobility Element developed as part of the General Plan Update includes policies to support the reduction of VMT. This includes, but is not limited to, Policy M-3.1, which requires the City to apply Complete Streets principles to all transportation improvement projects; Policy M-3.2 which directs the City to link activity centers, public facilities, and schools to transit and active transportation facilities; and Policy M-9.2 which requires TDM strategies as mitigation measures for new projects that exceed the City's VMT impact thresholds. The Draft EIR concluded that the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG RTP/SCS goals. Therefore, the Project's impacts related to VMT would be less than significant. Therefore, no mitigation measures to reduce VMT beyond the reductions identified with the Project are required. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-5 This comment states that the City should require a "post-development" VMT analysis to monitor VMT against thresholds and revisit mitigation measures for each new development, and provide new traffic data. As discussed in Section 5.17, *Transportation* in the Draft EIR, the Mobility Element developed as part of the General Plan Update includes policies to encourage cooperation with regional agencies, including Policy M-9.3 which encourages regional agencies such as Metro, the South Coast Air Quality Management District, and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel. The Draft EIR concluded that the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG RTP/SCS goals. Therefore, the Project's impacts related to VMT would be less

than significant. Therefore, no mitigation measures to reduce VMT beyond the reductions identified with the Project are required. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-6 This comment states that Caltrans promotes Smart Growth and recommends that the City balance housing and office developments. As discussed in Section 5.17, *Transportation* in the Draft EIR, the Land Use and Mobility elements developed as part of the General Plan Update includes policies to support the reduction of VMT, including increasing the balanced mix of residential and employment opportunities within the City with the proposed land uses. This includes the proposed Land Use Map, as well as Policy LU-1.1 which directs the City to provide a land use plan that promotes efficient development; and Policy LU-1.2 requires the balance of levels of employment and housing within the community. Additionally, the analysis found that implementation of the Project would result in reductions in VMT per capita and VMT per employee compared to 2023 existing conditions. The Draft EIR concluded that the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG RTP/SCS goals. Therefore, the Project's impacts related to VMT would be less than significant, and no mitigation measures to reduce VMT beyond the reductions identified with the Project are required. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-7 This comment recommends the City develop a VMT fee program for all development. The City currently collects development impact fees, including a traffic impact fee to ensure that development pay a fair share of the cost of capital facilities necessary to accommodate such development. As discussed in Section 5.17, *Transportation* in the Draft EIR, the Mobility Element developed as part of the General Plan Update includes policies and actions to support the reduction of VMT, including Policy M-5.3 which requires new developments to construct, when appropriate, transit facilities; Policy M-6.5 which requires new developments in the City to provide bicycle and pedestrian facilities; Action M-6a which directs the City as part of development review, to review any existing gaps in active transportation that inhibit mobility; and Policy M-9.2 which requires TDM strategies as mitigation measures for new projects that exceed the City's VMT impact thresholds. The Draft EIR concluded that the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG RTP/SCS goals. Therefore, the Project's impacts related to VMT would be less than significant, and no mitigation measures to reduce VMT beyond the reductions identified with the Project are required. The comment does not contain any information requiring changes to the Draft EIR. The comment is noted and no further response is warranted.

G-8 This comment notes that Caltrans has published the VMT-focused Transportation Impact Study Guide and the Caltrans Interim Land Development and Intergovernmental Safety Review Practitioners Guidance. The comment is noted and no further response is warranted.

G-9 This comment notes that future projects would be required to comply with Caltrans requirements for the transportation of heavy construction equipment and/or materials. The comment is noted and no further response is warranted.

This page intentionally left blank.

Attachment F

Draft Environmental Impact Report (EIR)

PUBLIC REVIEW DRAFT

ENVIRONMENTAL IMPACT REPORT

FOR THE

LAWNDALE GENERAL PLAN UPDATE

(SCH: 2022120088)

AUGUST 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

PUBLIC REVIEW DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE

LAWNDALE GENERAL PLAN UPDATE
(SCH: 2022120088)

AUGUST 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260
JChavez@lawndalecity.org
310-973-3206

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

Chapter Page Number

1.0 Executive Summary 1-1
1.1 Project Location 1-1
1.2 Project Background 1-1
1.3 Project Objectives 1-2
1.4 Project Characteristics 1-2
1.5 Environmental Impacts 1-3
1.6 Summary of Project Alternatives 1-5
1.7 Summary of Environmental Impacts and Mitigation Measures 1-6
2.0 Introduction 2-1
2.1 Purpose & Type of EIR 2-1
2.2 Lawndale General Plan Update 2-3
2.3 Intended Uses of the Program EIR 2-4
2.4 Known Responsible and Trustee Agencies 2-4
2.5 Organization and Scope 2-5
2.6 Environmental Review Process 2-7
2.7 Incorporated by Reference 2-8
2.8 Comments Received on the Notice of Preparation 2-9
3.0 Project Description 3-1
3.1 Project Location 3-1
3.2 Environmental Setting 3-1
3.3 Project Background 3-5
3.4 Statement of Objectives 3-5
3.5 Project Characteristics 3-6
3.6 Use of the EIR and Required Agency Approvals 3-15
4.0 Basis of Cumulative Analysis 4-1
4.1 Introduction 4-1
4.2 Cumulative Analysis in this EIR 4-2
5.1 Aesthetics 5.1-1
5.1.1 Purpose 5.1-1

5.1.2 Environmental Setting 5.1-2
5.1.3 Regulatory Setting 5.1-4
5.1.4 Significance Criteria and Thresholds 5.1-6
5.1.5 Impacts and Mitigation Measures 5.1-7
5.1.6 Cumulative Impacts 5.1-14
5.1.7 Significant Unavoidable Impacts 5.1-16
5.1.8 References 5.1-17

5.2 Agriculture Resources 5.2-1
5.2.1 Environmental Setting 5.2-1
5.2.2 Regulatory Setting 5.2-3
5.2.3 Significance Criteria and Thresholds 5.2-5
5.2.4 Impacts and Mitigation Measures 5.2-6
5.2.5 Cumulative Impacts 5.2-7
5.2.6 Significant Unavoidable Impacts 5.2-9
5.2.7 References 5.2-9

5.3 Air Quality 5.3-1
5.3.1 Purpose 5.3-1
5.3.2 Environmental Setting 5.3-1
5.3.3 Regulatory Setting 5.3-15
5.3.4 Significance Criteria and Thresholds 5.3-23
5.3.5 Impacts and Mitigation Measures 5.3-26
5.3.6 Cumulative Impacts 5.3-43
5.3.7 Significant Unavoidable Impacts 5.3-45
5.3.8 References 5.3-46

5.4 Biological Resources 5.4-1
5.4.1 Purpose 5.4-1
5.4.2 Environmental Setting 5.4-2
5.4.3 Regulatory Setting 5.4-6
5.4.4 Significance Criteria and Thresholds 5.4-11
5.4.5 Impacts and Mitigation Measures 5.4-12
5.4.6 Cumulative Impacts 5.4-19

5.4.7 Significant Unavoidable Impacts 5.4-22
5.4.8 References 5.4-22

5.5 Cultural Resources 5.5-1
5.5.1 Purpose 5.5-1
5.5.2 Environmental Setting 5.5-1
5.5.3 Regulatory Setting 5.5-6
5.5.4 Significance Criteria and Thresholds 5.5-11
5.5.5 Impacts and Mitigation Measures 5.5-11
5.5.6 Cumulative Impacts 5.5-17
5.5.7 Significant Unavoidable Impacts 5.5-19
5.5.8 References 5.5-19

5.6 Energy 5.6-1
5.6.1 Purpose 5.6-1
5.6.2 Environmental Setting 5.6-1
5.6.3 Regulatory Setting 5.6-2
5.6.4 Significance Criteria and Thresholds 5.6-8
5.6.5 Impacts and Mitigation Measures 5.6-9
5.6.6 Cumulative Impacts 5.6-18
5.6.7 Significant Unavoidable Impacts 5.6-18
5.6.8 References 5.6-19

5.7 Geology and Soils 5.7-1
5.7.1 Purpose 5.7-1
5.7.2 Environmental Setting 5.7-1
5.7.3 Regulatory Setting 5.7-11
5.7.4 Significance Criteria and Thresholds 5.7-13
5.7.5 Impacts and Mitigation Measures 5.7-14
5.7.6 Cumulative Impacts 5.7-25
5.7.7 Significant Unavoidable Impacts 5.7-30
5.7.8 References 5.7-30

5.8 Greenhouse Gas Emissions 5.8-1
5.8.1 Purpose 5.8-1
5.8.2 Environmental Setting 5.8-1
5.8.3 Regulatory Setting 5.8-5
5.8.4 Significance Criteria and Thresholds 5.8-19
5.8.5 Impacts and Mitigation Measures 5.8-20
5.8.6 Cumulative Impacts 5.8-37
5.8.7 Significant Unavoidable Impacts 5.8-38
5.8.8 References 5.8-38

5.9 Hazards and Hazardous Materials 5.9-1
5.9.1 Purpose 5.9-1
5.9.2 Environmental Setting 5.9-1
5.9.3 Regulatory Setting 5.9-6
5.9.4 Significance Criteria and Thresholds 5.9-13
5.9.5 Impacts and Mitigation Measures 5.9-14
5.9.6 Cumulative Impacts 5.9-33
5.9.7 Significant Unavoidable Impacts 5.9-37
5.9.8 References 5.9-37

5.10 Hydrology and Water Quality 5.10-1
5.10.1 Purpose 5.10-1
5.10.2 Environmental Setting 5.10-1
5.10.3 Regulatory Setting 5.10-6
5.10.4 Significance Criteria and Thresholds 5.10-16
5.10.5 Impacts and Mitigation Measures 5.10-17
5.10.6 Cumulative Impacts 5.10-35
5.10.7 Significant Unavoidable Impacts 5.10-41
5.10.8 References 5.10-41

5.11 Land Use and Planning 5.11-1
5.11.1 Environmental Setting 5.11-1
5.11.2 Regulatory Setting 5.11-5
5.11.3 Significance Criteria and Thresholds 5.11-11

5.11.4 Impacts and Mitigation Measures 5.11-11
5.11.5 Cumulative Impacts 5.11-24
5.11.6 Significant Unavoidable Impacts 5.11-26
5.11.7 References 5.11-26

5.12 Mineral Resources 5.12-1
5.12.1 Environmental Setting 5.12-1
5.12.2 Regulatory Setting 5.12-2
5.12.3 Significance Criteria and Thresholds 5.12-2
5.12.4 Impacts and Mitigation Measures 5.12-3
5.12.5 Cumulative Impacts 5.12-3
5.12.6 Significant Unavoidable Impacts 5.12-4
5.12.7 References 5.12-5

5.13 Noise 5.13-1
5.13.1 Purpose 5.13-1
5.13.2 Environmental Setting 5.13-1
5.13.3 Regulatory Setting 5.13-14
5.13.4 Significance Criteria and Thresholds 5.13-19
5.13.5 Impacts and Mitigation Measures 5.13-19
5.13.6 Cumulative Impacts 5.13-32
5.13.7 Significant Unavoidable Impacts 5.13-35
5.13.8 References 5.13-35

5.14 Population and Housing 5.14-1
5.14.1 Purpose 5.14-1
5.14.2 Environmental Setting 5.14-1
5.14.3 Regulatory Setting 5.14-4
5.14.4 Significance Criteria and Thresholds 5.14-8
5.14.5 Impacts and Mitigation Measures 5.14-8
5.14.6 Cumulative Impacts 5.14-13
5.14.7 Significant Unavoidable Impacts 5.14-14
5.14.8 References 5.14-14

5.15 Public Services 5.15-1
5.15.1 Environmental Setting 5.15-1
5.15.2 Regulatory Setting 5.15-4
5.15.3 Significance Criteria and Thresholds 5.15-9
5.15.4 Impacts and Mitigation Measures 5.15-9
5.15.5 Cumulative Impacts 5.15-23
5.15.6 Significant Unavoidable Impacts 5.15-27
5.15.7 References 5.15-27

5.16 Parks and Recreation 5.16-1
5.16.1 Environmental Setting 5.16-1
5.16.2 Regulatory Setting 5.16-3
5.16.3 Significance Criteria and Thresholds 5.16-4
5.16.4 Impacts and Mitigation Measures 5.16-4
5.16.5 Cumulative Impacts 5.16-11
5.16.6 Significant Unavoidable Impacts 5.16-12
5.16.7 References 5.16-13

5.17 Transportation 5.17-1
5.17.1 Purpose 5.17-1
5.17.2 Environmental Setting 5.17-1
5.17.3 Regulatory Setting 5.17-10
5.17.4 Significance Criteria and Thresholds 5.17-16
5.17.5 Impacts and Mitigation Measures 5.17-19
5.17.6 Cumulative Impacts 5.17-33
5.17.7 Significant Unavoidable Impacts 5.17-35
5.17.8 References 5.17-35

5.18 Tribal Cultural Resources 5.18-1
5.18.1 Purpose 5.18-1
5.18.2 Environmental Setting 5.18-1
5.18.3 Regulatory Setting 5.18-2
5.18.4 Significance Criteria and Thresholds 5.18-7
5.18.5 Impacts and Mitigation Measures 5.18-8

5.18.6 Cumulative Impacts 5.18-10
5.18.7 Significant Unavoidable Impacts 5.18-11
5.18.8 References 5.18-11

5.19 Utilities and Services Systems 5.19-1
5.19.1 Purpose 5.19-1
5.19.2 Environmental Setting 5.19-1
5.19.3 Regulatory Setting 5.19-13
5.19.4 Significance Criteria and Thresholds 5.19-25
5.19.5 Impacts and Mitigation Measures 5.19-26
5.19.6 Cumulative Impacts 5.19-46
5.19.7 Significant Unavoidable Impacts 5.19-50
5.19.8 References 5.19-50

5.20 Wildfire 5.20-1
5.20.1 Environmental Setting 5.20-1
5.20.2 Regulatory Setting 5.20-4
5.20.3 Significance Criteria and Thresholds 5.20-9
5.20.4 Impacts and Mitigation Measures 5.20-10
5.20.5 Cumulative Impacts 5.20-17
5.20.6 Significant Unavoidable Impacts 5.20-20
5.20.7 References 5.20-20

6.0 Other CEQA Considerations 6.0-1
6.1 Long-Term Implications of the Proposed Project 6.0-1
6.2 Significant Irreversible Environmental Changes 6.0-1
6.3 Growth-Inducing Impacts 6.0-3
6.4 Significant and Unavoidable Impacts 6.0-6

7.0 Alternatives 7-1
7.1 Introduction 7-1
7.2 Alternatives Considered in this EIR 7-1
7.3 Environmental Analysis 7-4

8.0 Report Preparers 8-1
8.1 Lead Agency 8-1
8.1 Preparers of the Environmental Impact Report 8-1

Table | Page Number

Table 1-1: General Plan Update Growth Assumptions 1-3
Table 1-2: Summary of Environmental Impacts and Mitigation Measures 1-7
Table 3-1: Existing General Plan Land Use Designations 3-2
Table 3-2: Proposed General Plan Land Use Designations 3-9
Table 3-3: General Plan 2045 Buildout by Land Use Designation 3-13
Table 3-4: General Plan Update Growth Assumptions 3-15
Table 4-1: Los Angeles County Growth Projections 4-4
Table 5.2-1: Acres of FMMP Farmland within Study Area 5.2-2
Table 5.3-1: Meteorological Summary 5.3-3
Table 5.3-2: Federal and State Ambient Air Quality Standards 5.3-9
Table 5.3-3: State and National Attainment Status in Los Angeles County 5.3-10
Table 5.3-4: South Coast Air Basin Attainment Status 5.3-11
Table 5.3-5: Local Area Air Quality Levels 5.3-13
Table 5.3-6: Maximum Regional Construction Emissions 5.3-37
Table 5.3-7: Maximum Regional Operational Emissions (pounds/day) 5.3-38
Table 5.4-1: Special-Status Plants Present or Potentially Present 5.4-4
Table 5.4-2: Special-Status Animals Present or Potentially Present 5.4-5
Table 5.5-1: Cultural Resources Recorded within the Planning Area 5.5-4
Table 5.5-2: Potential Built Environment Resources Locations Visited during Reconnaissance Survey 5.5-6
Table 5.6-1: Maximum Regional Construction Emissions (pounds/day) 5.6-10
Table 5.6-2: On-Road Mobile Fuel Generated by Project Construction Activities – By Phase 5.6-11
Table 5.7-1: Richter Magnitudes and Effects 5.7-5
Table 5.7-2: Likelihood of Having One or More Earthquakes by Size in the Next 30 Years (Starting from 2014) 5.7-6
Table 5.7-3: Historically Active and Active Fault Zones in the Region 5.7-7
Table 5.7-4: Planning Area Soils 5.7-8

Table 5.7-5: Geologic Units and Their Paleontological Potential 5.7-10
Table 5.8-1: Construction GHG Emissions (Metric Tons/Year) 5.8-20
Table 5.8-2: Operational GHG Emissions 2045 (Metric Tons/Year) 5.8-21
Table 5.8-3: City of Lawndale Community-wide GHG Emissions by Sector from 2005 to 2012 ..... 5.8-22
Table 5.8-4: Project Consistency with the 2022 Scoping Plan 5.8-25
Table 5.8-5: Project Consistency with the 2020-2045 RTP/SCS 5.8-29
Table 5.9-1: GeoTracker Database Sites 5.9-3
Table 5.11-1: Existing Land Use Summary 5.11-2
Table 5.11-2: City of Lawndale Projects Under Review 5.11-3
Table 5.12-1: Mineral Resources Classification System 5.12-1
Table 5.13-1: Decibel Addition 5.13-2
Table 5.13-2: Typical Noise Levels 5.13-3
Table 5.13-3: Perceived Changes in Noise Levels 5.13-3
Table 5.13-4: Noise Reduction Afforded by Common Building Construction 5.13-7
Table 5.13-5: Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration 5.13-8
Table 5.13-6: Short-Term Noise Measurement Summary 5.13-11
Table 5.13-7: Long-Term Noise Measurement Summary 5.13-12
Table 5.13-8: Existing Exterior Noise Levels Along Roadways 5.13-13
Table 5.13-9: FHWA Design Noise Levels 5.13-15
Table 5.13-10: 2045 No Project Traffic Noise Levels (dBA, CNEL) 5.13-21
Table 5.13-11: 2045 Plus Project Traffic Noise Levels (dBA, CNEL) 5.13-22
Table 5.13-12: Change in Noise Along Roadways (dBA, CNEL @ 50') 5.13-23
Table 5.13-13: Typical Construction Noise Levels 5.13-26
Table 5.13-14: Vibration Source Levels for Construction Equipment 5.13-30
Table 5.13-15: Guidelines Vibration Damage Potential Threshold Criteria 5.13-31
Table 5.14-1: Population Projections (2022-2045) 5.14-1
Table 5.14-2: Existing Housing Supply Mix 5.14-2
Table 5.14-3: Labor Force Participation and Unemployment 5.14-3
Table 5.14-4: Jobs to Housing Ratio 5.14-4
Table 5.14-5: Lawndale 6th Cycle Regional Housing Needs Allocation 5.14-5
Table 5.14-6: General Plan Update Compared to SCAG 5.14-9
Table 5.15-1: Lawndale Schools 5.15-3

Table 5.15-2: LESD/CVUHSD School Districts Student Generation Rates 5.15-16
Table 5.16-1: Existing Parkland and Recreational Uses in the Planning Area 5.16-2
Table 5.17-1: Pedestrian Facility Conditions in Lawndale 5.17-6
Table 5.17-2: LA Metro Bus Service in Lawndale 5.17-7
Table 5.17-3: Existing Truck Routes 5.17-9
Table 5.17-4: Existing Conditions (2023) VMT 5.17-10
Table 5.17-5: VMT Generated by Land Uses 5.17-24
Table 5.19-1: 2020 Annual Potable Water Supplies for the GSWC Southwest Service Area by Source 5.19-3
Table 5.19-2: Projected Water Supplies for the GSWC Southwest Service Area (AFY) 5.19-4
Table 5.19-3: Projected Demands for Potable Water – GSWC Southwest 5.19-5
Table 5.19-4: GSWC Southwest Service Reliability Assessment for Normal-, Single Dry-, and Multiple Dry-Years 5.19-6
Table 5.19-5: Annual Projected Buildout Flow vs. Current Treatment Capacity (MGD)1 ... 5.19-8
Table 5.19-6: Solid Waste Generation Rates in City of Lawndale 5.19-12
Table 5.20-1: History of Fire in Lawndale and Surrounding Area 5.20-2
Table 7-1: Growth Projections by Alternative 7-4
Table 7-2: Alternative 1: No Project/Existing General Plan Alternative Compared to the Proposed Project 7-5
Table 7-3: Alternative 2: Reduced Growth Alternative Compared to the Proposed Project. 7-16
Table 7-4: Comparison of Alternatives 7-26

Figure Page Number

Note: Figures are located at the end of the chapters.

Figure 3-1: Regional Location Map 3-19
Figure 3-2: General Plan Planning Area 3-21
Figure 3-3: Existing General Plan Land Use Map 3-23
Figure 3-4: Hawthorne Boulevard Specific Plan Map 3-25
Figure 3-5: General Plan Update Land Use Map 3-27
Figure 5.4-1: Land Cover Types 5.4-25
Figure 5.4-2: California Natural Diversity Database: One-Mile Search 5.4-27
Figure 5.7-1: Regional Fault Zones 5.7-33
Figure 5.7-2: Potential Liquefaction Susceptibility 5.7-35

Figure 5.7-3: Soil Survey 5.7-37
Figure 5.7-4: Shrink-Swell Potential of Soils 5.7-39
Figure 5.7-5: Landslide Susceptibility 5.7-41
Figure 5.10-1: Hydrologic Units: Subbasin 5.10-43
Figure 5.10-2: Hydrologic Units: Watershed 5.10-45
Figure 5.10-3: FEMA Flood Map 5.10-47
Figure 5.11-1: Existing Land Use Map 5.11-27
Figure 5.12-1: Mineral Resource Zones 5.12-7
Figure 5.13-1: Noise Measurement Locations 5.13-37
Figure 5.13-2: Existing Roadway Noise Level Contours 5.13-39
Figure 5.13-3: 2045 No Project Noise Level Contours 5.13-41
Figure 5.13-4: 2045 With Project Noise Level Contours 5.13-43
Figure 5.15-1: Public Safety Facilities 5.16-29
Figure 5.16-1: Parks and Recreation Facilities 5.16-15
Figure 5.17-1: Existing and Planned Bicycle Facilities 5.17-37
Figure 5.17-2: Existing and Planned Transit Routes 5.17-39
Figure 5.17-3: Existing Truck Routes 5.17-41
Figure 5.19-1: Existing Water Infrastructure 5.19-53
Figure 5.19-2: Existing Sewer Infrastructure 5.19-55
Figure 5.19-3: Existing Stormwater and Flood Control Facilities 5.19-57

Appendices

Appendix A – NOP and NOP Comments

Appendix B – Air Quality, Energy and Greenhouse Gas Emissions Modeling Data

Appendix C – Biological Resources

Appendix D – Cultural and Paleontological Resources Study

Appendix E – Noise Impact Study

Appendix F – Transportation Impact Analysis

Appendix G – Tribal Consultation Communications

This page intentionally left blank.

1.0 EXECUTIVE SUMMARY

1.1 PROJECT LOCATION

The City of Lawndale is located in the South Bay area of Los Angeles County, approximately 10 miles southwest of downtown Los Angeles, refer to Figure 3-1, *Regional Location Map* in Section 3.0, *Project Description*. The City is approximately 1.9 square miles (1,241 acres) and is bounded by the City of Hawthorne to the north and west, by unincorporated areas of Los Angeles County and the City of Gardena to the east, by the City of Torrance to the south, and by the City of Redondo Beach to the south and west. Regional access to the City is provided by Interstate 405, a major north-south highway which provides access to Lawndale and the greater Los Angeles region.

The Planning Area is the geographic area for which the General Plan Update provides a framework for long-term growth and resource conservation. State law requires the Planning Area for the General Plan Update to include all territory within Lawndale's incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300). The General Plan Update Planning Area, as shown in Figure 3-2, *General Plan Planning Area* of Section 3.0, includes the entire City limits (approximately 1,241 acres) as well as the City of Lawndale's Sphere of Influence (approximately 314 acres); the entire Planning Area is approximately 1,555 acres.

1.2 PROJECT BACKGROUND

California Government Code Section 65300 et seq. requires all counties and cities to prepare and maintain a General Plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The General Plan acts as a "constitution" for development, and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards) are required by law to be consistent with the General Plan.

The General Plan includes the eight elements mandated by State law, including: Circulation, Conservation, Housing, Land Use, Noise, Open Space, Environmental Justice and Safety. General Plans must also address the topics of climate change and resiliency planning, either as separate elements or as part of other required elements. The City's 2021-2029 Housing Element was adopted on February 7, 2022 and is not part of this update. The City may also address other topics of interest; this General Plan includes an element related to Economic Development and Community Facilities.

The California Government Code also requires that a General Plan be comprehensive, internally consistent, and plan for the long term. This General Plan Update plans out to the year 2045.

The City of Lawndale circulated a Notice of Preparation (NOP) of an EIR for the proposed Project on December 6, 2022 to trustee and responsible agencies, the State Clearinghouse, and the public. A scoping meeting was held on December 15, 2022 at the Harold E. Hofmann Community Center in Lawndale. The NOP public review period began on Tuesday, December 6, 2022 and ended on Thursday, January 5, 2023.

1.3 PROJECT OBJECTIVES

The following objectives were identified for the proposed update to the General Plan:

1. Reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
3. Protect Lawndale's existing residences, character, and sense of community;
4. Proactively plan for and accommodate local and regional growth in a responsible manner;
5. Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
6. Allow for a range of high-quality housing options;
7. Attract and retain businesses and industries that provide jobs for local residents;
8. Continue to maintain and improve multimodal transportation opportunities;
9. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
10. Address new requirements of State law; and
11. Address emerging transportation, housing, and employment trends.

1.4 PROJECT CHARACTERISTICS

The City Lawndale is preparing a comprehensive update to its existing General Plan. The updated Lawndale General Plan is expected to be adopted in 2023 and will guide the City's development, growth, and conservation through land use objectives and policy guidance. The General Plan Update is intended to be an expression of the community's vision for the City and Planning Area, and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The City will implement the General Plan Update by requiring development, infrastructure improvements, and other projects to be consistent with its policies, and by implementing the actions included in the General Plan Update.

The Lawndale General Plan Update includes a comprehensive set of goals, policies, and actions (implementation measures), organized into Elements, as well as a revised Land Use Map (refer to Figure 3-5, *General Plan Update Land Use Map* in Section 3.0). The goals and policies provide guidance to the City on how to direct change, manage growth, and manage resources over the 20-year life of the General Plan. In order to ensure that the goals and policies in the General Plan are effectively implemented, a series of actions, or implementation measures have been developed, and are presented in each Element alongside the goals and policies they implement.

The General Plan Update includes the following Elements: Land Use Element; Mobility Element (Circulation); Resource Management Element (Conservation, Open Space and Air Quality); Public Safety Element (Safety and Noise); Environmental Justice Element; Economic Development Element; and Community Facilities Element. Together, they present a consistent policy platform, as required by law.

1.4.1 GENERAL PLAN BUILDOUT ANALYSIS

The maximum density or intensity permitted for an individual parcel is controlled by the land use designation, unless a density bonus pursuant to Lawndale Municipal Code Chapter 17.50, *Density Bonus Provisions for Residential Units* applies. In addition to the land use designation, development of a parcel is influenced by a variety of factors including the physical characteristics of a parcel, compatibility with nearby uses, access and infrastructure limitations, market factors, and previous developments trends.

While no specific development projects are proposed as part of the Lawndale General Plan Update, the General Plan Update will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The buildout analysis assumes a 20-year planning horizon, and 2045 is to be the full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation).

Table 1-1, *General Plan Update Growth Assumptions*, summarizes the growth anticipated by the General Plan Update based upon the buildout potential associated with the General Plan Update Land Use Map in 2045 compared to existing on-the-ground conditions by General Plan Update Land Use Designation (refer to Table 3-3, *General Plan 2045 Buildout by Land Use Designation*, of Section 3.0).

Table 1-1
General Plan Update Growth Assumptions

Description	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs
Existing Conditions (2022)	11,463	37,948	4,542,162	6,470
2045 General Plan	15,405	47,430	5,351,026	9,208
Net Change	+3,942	+9,482	+808,864	+2,738

1.5 ENVIRONMENTAL IMPACTS

The City determined that a Program EIR should be prepared pursuant to the California Environmental Quality Act Guidelines (CEQA Guidelines). The environmental issues identified by the City for assessment in the Program EIR are:

- Aesthetics
- Agricultural Resources
- Air Quality

- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Section 5.0, *Environmental Analysis*, of this EIR provides a description of potential environmental impacts of the General Plan Update. After implementation of the General Plan Update goals, policies, and actions, most of the potentially significant impacts associated with the proposed General Plan Update would be reduced to a less than significant level. However, the impacts listed below could not be feasibly mitigated and would result in a significant and unavoidable impact with implementation of the General Plan Update.

Air Quality

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.
- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

Greenhouse Gas Emissions

- Project implementation would generate greenhouse gas emissions that would not satisfy the Greenhouse Gas reduction targets established by Federal and State law and may have a significant effect on the environment.
- Project implementation would contribute to global climate change through a cumulatively considerable contribution of greenhouse gases. The Project would result in a cumulatively considerable and significant adverse GHG emissions impact.

1.6 SUMMARY OF PROJECT ALTERNATIVES

Pursuant to Section 15126.6 of the CEQA Guidelines, "an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives." This EIR includes two alternatives as discussed below.

- Alternative 1 – No Project Alternative
- Alternative 2 – Reduced Growth Alternative

Alternative 1: No Project Alternative

As required by CEQA Guidelines Section 15126.6(e), under Alternative 1, the City would not adopt the General Plan Update. The existing Lawndale General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, goals, policies, or actions would occur. This Alternative assumes that ultimate development of the 1992 General Plan would occur and the 1992 General Plan would continue to provide outdated information regarding several issues, including projections and policy direction that were identified in the 1990s that are not reflective of the existing socioeconomic data and anticipated development patterns. This Alternative assumes increased residential development opportunities in the Hawthorne Boulevard Specific Plan area and Housing Opportunity Overlay land use designation areas in order to accommodate the City's Regional Housing Needs Allocation (RHNA) as identified in the 2021-2029 Housing Element, would not occur. Subsequent projects, such as updating the Hawthorne Boulevard Specific Plan and amending the Municipal Code (including the zoning map), would not occur. The existing General Plan Land Use Map is shown on Figure 3.3 in Section 3.0.

The development anticipated by the No Project Alternative would result in the following when compared to the General Plan Update:

- 2,019 fewer housing units;
- 8,778 fewer residents;
- 280,047 fewer nonresidential square feet of development; and
- 491 fewer jobs.

Alternative 2: Reduced Growth Alternative

Under Alternative 2, the City would adopt the updated General Plan policy document, but at residential densities lower than those reflected in the proposed General Plan Update. This Alternative is defined by two major changes from the proposed General Plan Update:

1. Reduction in the maximum density associated with the Housing Opportunity Overlay (HOO) land use designation; in Alternative 2, the maximum density for residential development in areas designated with the HOO is reduced from 100 du/ac to 33 du/ac (consistent with the maximum density proposed for the High Density Residential land use designation).
2. Reduction in the maximum density associated with residential development within the Hawthorne Boulevard Specific Plan (HBSP) land use designation; in Alternative 2, the maximum density for residential development in the HBSP is reduced from 150 du/ac to 33 du/ac (consistent with the maximum density proposed for the High Density Residential land use designation).

Under Alternative 2, non-residential development potential and anticipated job growth would remain unchanged from the proposed General Plan Update. This alternative continues to allow for mixed-use opportunities with less residential development potential than allowed under the General Plan Update. It also reflects a maximum residential density of 33 du/ac, consistent with the maximum residential density allowed under the current General Plan. This alternative was developed to potentially reduce the severity of potential impacts related to air quality and greenhouse gas emissions, as overall development of residential uses would be less than what could develop under the proposed Project.

The development anticipated by the Reduced Growth Alternative would result in the following when compared to the General Plan Update:

- 1,603 fewer housing units;
- 3,639 fewer residents;
- Nonresidential development would remain the same; and
- Employment opportunities would remain the same.

1.7 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the Project's significant effects on the environment. The CEQA Guidelines defines a significant effect as a substantial adverse change in the physical conditions, which exist in the area affected by the proposed project. A less than significant effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of General Plan Update policies and actions, mitigation measures, and/or compliance with regulations.

The environmental impacts of the proposed Project, the impact level of significance prior to mitigation, the proposed mitigation measures to mitigate an impact, and the impact level of significance after mitigation are summarized in Table 1-2, *Summary of Environmental Impacts and Mitigation Measures*.

Table 1-2
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.1 Aesthetics			
Would the project have a substantial adverse effect on a scenic vista?	Land Use Policies 3.1, 3.3, 3.5, 4.2, 4.3. Land Use Actions 3a, 3b, 4e.	No mitigation measures are required.	Less Than Significant Impact
Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Land Use Policies 1.1, 3.3, 3.9, 4.2, 4.3. Land Use Actions 1a, 1b, 1c, 1d, 4e.	No mitigation measures are required.	Less Than Significant Impact
Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Land Use Policy 3.7. Land Use Actions 3c, 3d, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.2 Agricultural Resources			
Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Implementation of the proposed General Plan Update would have no impact on forest land, timber, or timber production.	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, conflict with existing zoning for agricultural use, or a Williamson Act contract?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No relevant proposed General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
5.3 Air Quality			
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Land Use Policies 1.1, 1.2, 1.4, 1.6. Land Use Action 3b. Mobility Policies 3.1, 3.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 9.2. Mobility Actions 3a, 5a, 6a, 6b, 6c, 9b. Resource Management Goals 4, 5. Resource Management Policies 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9. Resource Management Actions 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4j, 4k, 4l, 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard?	Refer to the General Plan Update goals, policies and actions cited above in this section.	There is no feasible mitigation available for this impact.	Significant and Unavoidable Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project expose sensitive receptors to substantial pollutant concentrations?	Refer to the General Plan Update goals, policies and actions cited above in this section.	There is no feasible mitigation available for this impact.	Significant and Unavoidable Impact
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No proposed General Plan Update goals, policies, or actions specific to odors.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Significant and Unavoidable Impact
Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Significant and Unavoidable Impact
Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.4 Biological Resources			
Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Resource Management Goal 1. Resource Management Policies 1.1, 1.3, 1.7. 1.8, 6.3. Resource Management Actions 1b, 1c, 1g, 1h, 6a. Public Safety Policy 7.3.	No mitigation measures are required.	Less Than Significant Impact
Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Resource Management Policy 6.3. Resource Management Action 6a.	No mitigation measures are required.	Less Than Significant Impact
Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Resource Management Policy 6.3. Resource Management Action 6a.	No mitigation measures are required.	Less Than Significant Impact
Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Resource Management Goal 1. Resource Management Policies 1.1, 1.3, 1.7. 1.8, 6.3. Resource Management Actions 1b, 1c, 1g, 1h, 6a. Public Safety Policy 7.3.	No mitigation measures are required.	Less Than Significant Impact
Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Resource Management Element Policy 1.7.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	There are no General Plan Update goals, policies, or actions specific to habitat conservation plans.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, a have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	No Impact
5.5 Cultural Resources			
Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Resource Management Policies 3.1, 3.2, 3.3, 3.4, 3.6, 3.7. Resource Management Actions 3a, 3b, 3c, 3d, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Resource Management Policies 3.1, 3.2, 3.4, 3.7. Resource Management Actions 3a, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project disturb any human remains, including those interred outside of formal cemeteries?	Resource Management Policies 3.1, 3.5. Resource Management Action 3g.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.6 Energy			
Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or conflict with or obstruct a state or local plan for renewable energy or energy efficiency	Resource Management Goals 4, 5. Resource Management Policies 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9. Resource Management Action 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4i, 4j, 4k, 4l, 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.7 Geology & Soils			
Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?	Public Safety Goal 2. Public Safety Policies 2.1, 2.2, 2.3, 2.4. Public Safety Actions 2a, 2b, 2c, 2d, 2e.	No mitigation measures are required.	Less Than Significant Impact
Result in substantial soil erosion of the loss of topsoil?	Resource Management Policy 6.2. Resource Management Action 6a. Public Safety Policies 5.4, 5.6. Public Safety Action 2d.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Public Safety Goal 2. Public Safety Policies 2.1, 2.2, 2.3, 2.4. Public Safety Actions 2a, 2b, 2c, 2d, 2e.	No mitigation measures are required.	Less Than Significant Impact
Be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Public Safety Goal 2. Public Safety Policies 2.1, 2.2, 2.3. Public Safety Actions 2a, 2b, 2c, 2d, 2e.	No mitigation measures are required.	Less Than Significant Impact
Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	There are no General Plan Update goals, policies, or actions specific to septic tanks or alternative waste water disposal systems.	No mitigation measures are required.	No Impact
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Resource Management Policy 3.1. Resource Management Actions 3a, 3f.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	There are no General Plan Update goals, policies, or actions specific to septic tanks or alternative waste water disposal systems.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Refer to the General Plan Update goals, policies and actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.8 Greenhouse Gas Emissions			
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Land Use policies 1.1, 1.2, 1.4. Mobility Policies 3.1, 3.2, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 9.2, 9.3, 9.4. Mobility Actions 5a, 6a, 6b, 6c, 9a, 9b. Resource Management Goals 4, 5. Resource Management Policies 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9. Resource Management Actions 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4i, 4j, 4k, 4l, 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h.	There is no feasible mitigation available for this impact.	Significant and Unavoidable Impact
Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	There is no feasible mitigation available for this impact.	Significant and Unavoidable Impact
Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	There is no feasible mitigation available for this impact.	Significant and Unavoidable Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.9 Hazards & Hazardous Materials			
Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Mobility Policy 7.1. Mobility Action 7a. Resource Management Policy 2.3. Public Safety Goals 1, 3. Public Safety Policies 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9. Public Safety Actions 1a, 1b, 1c, 1d, 1e, 1f, 3a, 3b, 3c, 3d, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Mobility Policy 7.1. Mobility Action 7a. Resource Management Policy 2.3. Public Safety Goal 3. Public Safety Policies 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9. Public Safety Actions 3a, 3b, 3c, 3d, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Mobility Policy 7.1. Mobility Action 7a. Resource Management Policy 2.3. Public Safety Goal 3. Public Safety Policies 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9. Public Safety Actions 3a, 3b, 3c, 3d, 3e.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Public Safety Goal 3. Public Safety Policies 3.1, 3.2, 3.3, 3.4, 3.5. Public Safety Actions 3a, 3b, 3c.	No mitigation measures are required.	Less Than Significant Impact
For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	There are no General Plan Update goals, policies, or actions specific to airports.	No mitigation measures are required.	Less Than Significant Impact
Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Public Safety Goal 1. Public Safety Policies 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8. Public Safety Actions 1a, 1b, 1c, 1d, 1e, 1f.	No mitigation measures are required.	Less Than Significant Impact
Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Public Safety Goal 4. Public Safety Policies 4.1, 4.2, 4.3, 4.4, 4.5. Public Safety Actions 4a, 4b.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, combined with other related cumulative projects, result in significant cumulative impacts with respect to wildfire?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.10 Hydrology			
Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Resource Management Policies 6.2, 6.4. Resource Management Action 6a. Community Facilities Policies 4.1, 4.2, 4.3, 4.4. Community Facilities Actions 4a, 4b, 4c, 4d, 4e.	No mitigation measures are required.	Less Than Significant Impact
Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Resource Management Policies 6.1, 6.2. Resource Management Actions 6b, 6c. Community Facilities Policies 2.1, 2.2, 2.3. Community Facilities Actions 2a, 2c.	No mitigation measures are required.	Less Than Significant Impact
Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: • result in substantial erosion or siltation on- or off-site; • substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or • impede or redirect flood flows?	Resource Management Policies 6.2, 6.4. Resource Management Action 6a. Public Safety Policies 5.1, 5.3, 5.4, 5.5, 5.6. Public Safety Actions 5a, 5b, 5c. Community Facilities Policies 4.1, 4.2, 4.3, 4.4. Community Facilities Actions 4a, 4b, 4c, 4d, 4e.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Resource Management Policies 6.2, 6.4. Resource Management Action 6a. Public Safety Policies 5.1, 5.2, 5.3, 5.4, 5.5, 5.6. Public Safety Actions 5a, 5b, 5c.	No mitigation measures are required.	Less Than Significant Impact
Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Resource Management Policies 6.1, 6.2, 6.4. Resource Management Action 6a, 6b, 6c. Community Facilities Policies 2.1, 2.2, 2.3, 4.2, 4.3, 4.4. Community Facilities Actions 4a, 4b, 4c, 4d, 4e.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: • result in substantial erosion or siltation on- or off-site; • substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; • create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or • impede or redirect flood flows?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.11 Land Use and Population			
Would the project physically divide an established community?	Land Use Policies 1.1, 2.1, 3.1, 4.3. Land Use Actions 3b, 3c, 4e.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Land Use Policies 1.1, 1.2, 1.6, 2.2, 3.1, 4.3, 4.4, 4.7. Land Use Actions 1e, 3b, 3c, 4e, 4f. Mobility Policies 1.7, 2.2, 2.3, 3.1, 3.2, 3.3, 3.6, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.4, 6.5, 6.6, 7.1, 7.2, 9.2, 9.3, 9.4. Mobility Actions1e, 2a, 3a, 5a, 5b, 6a, 6b, 6c, 7a, 9a, 9b. Resource Management Policies 1.9, 1.10, 2.4, 2.5, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.8, 4.9, 4.10, 5.1, 5.2, 5.3, 5.4, 5.5. Resource Management Actions 1g, 1h, 2a, 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4i, 4j, 4k, 4l, 5a, 5b, 5c, 5d, 5e, 5f, 5g, 5h. Public Safety Policies 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13. Public Safety Actions 7a, 7b, 7c, 7d, 7e, 7f.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, physically divide an established community?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.12 Mineral Resources			
Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project, combined with other relative cumulative projects, result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other relative cumulative projects, result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
5.13 Noise			
Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Public Safety Policies 6.1, 6.2, 6.3, 6.4, 6.8, 6.9. Public Safety Actions 6c, 6d, 6e, 6f.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?	Public Safety Policy 6.14. Public Safety Actions 6c, 6k.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project, combined with other related cumulative projects, expose people residing or working in the project area to excessive noise?	There are no relevant General Plan Update goals, policies, and actions.	No mitigation measures are required	No Impact
5.14 Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure?	Land Use Goal 2. Land Use Policies 1.1, 1.2, 2.2, 3.1. Land Use Actions 1e, 3c.	No mitigation measures are required.	Less Than Significant Impact
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Land Use Goal 2. Land Use Policies 1.1, 2.2, 2.3, 3.1, 3.3, 3.4. Land Use Actions 2e, 3c, 3e.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes, and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.15 Public Services			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection and emergency services?	Land Use Policies 1.5, 2.6. Land Use Action 1e. Public Safety Policies 1.5, 4.1, 4.2, 4.4. Public Safety Actions 1e, 4a. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.10, 1.11. Community Facilities Actions 1a, 1b, 1c, 1d, 1e.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: police protection?	Land Use Policies 1.5, 2.6. Land Use Action 1e. Public Safety Policy 1.5. Public Safety Action 1e. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.10, 1.11. Community Facilities Actions 1a, 1b, 1c, 1d, 1e.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: schools?	Land Use Policies 1.5, 2.6. Land Use Action 1e. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.10, 1.11, 6.1, 6.2, 6.3. Community Facilities Actions 1a, 1b, 1c, 1d, 1e, 6a.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: library facilities?	Land Use Policies 1.5, 2.6. Land Use Action 1e. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.10, 1.11, 6.6. Community Facilities Actions 1a, 1b, 1c, 1d, 1e, 6b.	No mitigation measures are required.	Less Than Significant Impact
Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: police protection?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: schools?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: other public facilities?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.16 Parks and Recreation			
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Land Use Policy 1.5. Land Use Action 1e. Resource Management Policies 1.1, 1.2, 1.4, 1.5, 1.8. Resource Management Actions 1a, 1b, 1c, 1d, 1h. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5. Community Facilities Actions 1b, 1c, 1d.	No mitigation measures are required.	Less Than Significant Impact
Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Land Use Policies 1.5, 2.6. Land Use Action 1e. Resource Management Policies 1.1, 1.4, 1.5. Resource Management Actions 1a, 1b, 1c, 1d. Community Facilities Goal 1. Community Facilities Policy 1.1, 1.2, 1.3, 1.4, 1.5. Community Facilities Actions 1b, 1c, 1d.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: parks?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the Project, combined with other relevant cumulative projects, increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the Project, combined with other relevant cumulative projects, include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.17 Transportation			
Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	Land Use Policies 1.1, 1.2, 4.4. Mobility Goals 1, 3, 6. Mobility Policies 1.5, 1.7, 2.3, 3.1, 3.2, 3.3, 3.6, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.4, 6.5, 6.6. Mobility Actions 1a, 1b, 1e, 3a, 5a, 5b, 6a, 6b, 6c. Resource Management Policies 1.9, 1.10, 4.4, 4.5, 4.6. Resource Management Actions 1g, 1h, 4g, 4h. Economic Development Policies 4.2, 4.3. Economic Development Action 4c.	No mitigation measures are required.	Less Than Significant Impact
Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Land Use Policies 1.1, 1.2, 2.2, 4.4. Mobility Goals 3, 6. Mobility Policies 3.1, 3.2, 3.3, 3.6, 5.1, 5.2, 5.3, 5.4, 5.5, 6.1, 6.2, 6.4, 6.5, 6.6, 9.1, 9.2, 9.3, 9.4. Mobility Actions 3a, 5a, 5b, 6a, 6b, 6c, 9a, 9b. Resource Management Policies 1.9, 1.10, 4.4, 4.5, 4.6. Resource Management Actions 1g, 1h, 4g, 4h.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Land Use Goal 3. Land Use Policies 1.1, 3.1, 3.4. Land Use Action 3b. Mobility Goal 3. Mobility Policies 3.1, 3.4, 3.5, 3.6. Mobility Actions 3a, 3e.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in inadequate emergency access?	Mobility Element Goal 3. Mobility Element Policies 2.1, 2.2, 3.5. Action 3e. Public Safety Policy 1.6, 4.3.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, result in inadequate emergency access?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.18 Tribal Cultural Resources			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Resource Management Policies 3.1, 3.2, 3.5. Resource Management Actions 3a, 3e, 3g.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
5.19 Utilities and Service Systems			
Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Land Use Policy 2.6. Land Use Action 1e. Resource Management Policies 5.4, 5.5, 6.1, 6.2, 6.4. Resource Management Actions 5a, 5b, 5c, 6b, 6c. Community Facilities Goal 1. Community Facilities Policies 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, 1.9, 1.10, 1.11, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 5.1. Community Facilities Actions 1a, 1b, 1c, 1d, 1e, 2a, 2c, 3a, 4d, 4e, 5a.	No mitigation measures are required.	Less Than Significant Impact
Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Resource Management Policies 6.1, 6.2. Resource Management Action 6b, 6c. Community Facilities Policies 2.1, 2.2, 2.3. Community Facilities Actions 2a, 2c.	No mitigation measures are required.	Less Than Significant Impact
Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Land Use Policy 2.6. Land Use Action 1e. Community Facilities Goal 1. Community Facilities Policies 1.1, 1.3, 1.5, 1.8, 1.10, 1.11, 3.1, 3.2, 3.3. Community Facilities Actions 1a, 1b, 1c, 1d, 1e, 3a.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Resource Management Policies 2.1, 2.2, 2.4, 2.5, 2.6, 2.7. Resource Management Actions 2a, 2c, 2e.	No mitigation measures are required.	Less Than Significant Impact
Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Resource Management Policies 2.1, 2.2, 2.4, 2.5, 2.6, 2.7. Resource Management Actions 2a, 2c, 2e.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, or have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
Would the project, combined with other related cumulative projects, generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	Less Than Significant Impact
5.20 Wildfire			
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Public Safety Goal 1. Public Safety Policy 1.2, 1.3, 1.4, 1.6, 4.2, 4.3. Public Safety Action 1a, 1b.	No mitigation measures are required.	No Impact
Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Public Safety Goal 4. Public Safety Policies 1.4, 1.6, 4.1, 4.2, 4.4. Public Safety Action 4a, 4b.	No mitigation measures are required.	No Impact
Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Public Safety Goal 4. Public Safety Policies 1.2, 1.4, 1.5, 4.1, 4.2, 4.4.	No mitigation measures are required.	No Impact

Table 1-2 (continued)
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	General Plan Update Goals, Policies, and Actions	Mitigation Measures	Level of Significance
Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Public Safety Goals 1, 4, 5. Public Safety Policies 1.2, 4.1, 4.2, 5.3, 5.4, 5.6. Public Safety Action 4a.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, substantially impair an adopted emergency response plan or emergency evacuation plan?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	No Impact
Would the project, combined with other related cumulative projects, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Refer to the General Plan Update Goals, Policies, and Actions cited above in this section.	No mitigation measures are required.	No Impact

This page intentionally left blank.

2.0 INTRODUCTION AND PURPOSE

The California Environmental Quality Act (CEQA) specifies that before a public agency decides to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the Project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. The State CEQA Guidelines are located within the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Sections 15000-15387, while the CEQA Statute is codified as Public Resources Code Sections 21000-21189.70.10.

2.1 PURPOSE OF THE EIR

The California Environmental Quality Act (CEQA) requires that all State and local agencies consider the potential environmental impacts of projects over which they have discretionary authority. An Environmental Impact Report (EIR) is intended to provide decision-makers and the public with information concerning the potential environmental impacts of a proposed project, possible ways to reduce or avoid the possible significant environmental impacts, and identify alternatives to the project. An EIR must also disclose significant impacts that cannot be avoided; growth inducing impacts; effects found not to be significant; as well as significant cumulative impacts of all past, present, and reasonably anticipated future projects.

The City of Lawndale is the Lead Agency under CEQA and is responsible for preparing this Program EIR for the General Plan Update (State Clearinghouse No. 2022120088). This Program EIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA, as adopted by the City of Lawndale. The principal CEQA Guidelines sections governing content of this document are Sections 15120 through 15132 (Contents of Environmental Impact Reports), and Section 15168 (Program EIR).

The purpose of this Program EIR is to review the existing conditions, analyze potential environmental impacts, identify General Plan Update policies and programs that serve as mitigation, and identify additional mitigation measures to reduce potentially significant effects of the proposed City of Lawndale General Plan Update (General Plan Update). For more detailed information regarding the proposed Project, refer to Section 3.0, *Project Description*.

The City of Lawndale (which has the principal responsibility for processing and approving the Project) and other public (i.e., responsible and trustee) agencies that may use this Program EIR in the decision-making or permit process will consider the information in this Program EIR, along with other information that may be presented during the CEQA process. Environmental impacts are not always able to be mitigated to a level considered less than significant; in those cases, impacts are considered significant and unavoidable impacts. In accordance with Section 15093(b) of the CEQA Guidelines, if a public agency approves a project that has significant impacts that cannot be mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other

information in the public record for the project. This is termed, per Section 15093 of the CEQA Guidelines, a "statement of overriding considerations."

This document analyzes the environmental effects of the General Plan Update to the degree of specificity appropriate to the current proposed actions, as required by Section 15146 of the CEQA Guidelines. The analysis considers the activities associated with the Project to determine the short-term and long-term effects associated with their implementation. This Program EIR discusses both the direct and indirect impacts of this Project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects at a programmatic level.

This EIR has been prepared as a Program EIR in accordance with CEQA Guidelines Section 15168, which states the following:

a) *General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:*
   1. *Geographically,*
   2. *As logical parts in the chain of contemplated actions,*
   3. *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
   4. *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*

b) *Advantages. Use of a program EIR can provide the following advantages. The program EIR can:*
   1. *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*
   2. *Ensure consideration of cumulative impacts that might be slighted in a case- by-case analysis,*
   3. *Avoid duplicative reconsideration of basic policy considerations,*
   4. *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
   5. *Allow reduction in paperwork.*

c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.*
   1. *If a later activity would have effects that were not examined in the Program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
   2. *If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
   3. *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
   4. *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to*

determine whether the environmental effects of the operations were covered in the program EIR.

5. *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

d) *Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The program EIR can:*

1. *Provide the basis in an Initial Study for determining whether the later activity may have any significant impacts.*
2. *Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.*
3. *Focus an EIR on a subsequent project to permit discussion solely of new effects which had not been considered before.*

2.2 LAWNDALE GENERAL PLAN UPDATE

GENERAL PLAN

The Lawndale General Plan (General Plan Update or Project) is the overarching policy document that guides land use, housing, transportation, open space, public safety, community services, and other policy decisions throughout the City of Lawndale and the Sphere of Influence (collectively referred to as the Planning Area). The General Plan includes the eight elements mandated by State law, to the extent that they are relevant locally, which include: land use, circulation, housing, conservation, open space, noise, environmental justice, and safety elements, as specified in Government Code Section 65302. The City has chosen to combine the topics of Conservation and Open Space into one Element: Resource Management. The topic of Noise is included in the Public Safety Element. General plans must also address the topics of climate change and resiliency planning, either as separate elements or as part of other required elements. At the discretion of each jurisdiction, the general plan may combine these elements and may add optional elements relevant to the physical features of the jurisdiction. The City may also address other topics of interest; this General Plan includes elements related to Economic Development and Community Facilities. The General Plan Update sets out the goals, policies, and actions in each of these areas, serves as a policy guide for how the City will make key planning decisions in the future, and guides how the City will interact with the broader Los Angeles County, surrounding cities, and other local, regional, State, and Federal agencies.

The General Plan Update contains the goals and policies that will guide future decisions within the Planning Area. It also identifies implementation programs, in the form of actions, that will ensure the goals and policies in the General Plan Update are carried out. As part of the General Plan Update, the City and the consultant team prepared several support documents that serve as the building blocks for the General Plan Update and analyze the environmental impacts associated with implementing the General Plan Update.

EXISTING CONDITIONS REPORT

The Existing Conditions Report discusses Lawndale's current (2019-2023) trends and conditions; what is on the ground. It provides a detailed description of a wide range of topics within the City, such as demographic and economic conditions, land use, public facilities, and environmental resources. The Existing Conditions Report provides decision-makers, the public, and local agencies with context for making policy decisions. The Existing Conditions Report also provides information for the environmental setting and description contained within this Draft EIR.

ENVIRONMENTAL IMPACT REPORT

An EIR responds to the requirements of CEQA as set forth in Sections 15126, 15175, and 15176 of the CEQA Guidelines. The Community Development Department and City Council will use the EIR during the General Plan Update process in order to understand the potential environmental implications associated with implementing the General Plan Update. This EIR was prepared concurrently with the General Plan policy document in order to facilitate the development of a General Plan that is largely self-mitigating. In other words, as environmental impacts associated with the new General Plan Update, including the Land Use Map, were identified; policies and actions were incorporated into the General Plan Update policy document in order to reduce or avoid potential environmental impacts.

2.3 INTENDED USES OF THE PROGRAM EIR

The City of Lawndale, as the lead agency, has prepared this EIR to provide the public and responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from adoption of the General Plan Update and subsequent implementation of projects consistent with the General Plan Update. The environmental review process enables interested parties to evaluate the proposed Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potential adverse impacts, and to consider a reasonable range of alternatives to the project. While CEQA requires that consideration be given to avoiding adverse environmental effects, the lead agency must balance adverse environmental effects against other public objectives, including the economic and social benefits of a project, in determining whether a project should be approved.

This EIR will be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the General Plan Update. This EIR may also be used by other agencies within Los Angeles County.

2.4 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines Section 15386). While no Responsible Agencies or Trustee Agencies are responsible for approvals associated with adoption of the General Plan Update, implementation of future projects within the Planning Area may require permits and approvals from such agencies, which may include the following:

- California Air Resources Board (CARB);
- California Department of Conservation;
- California Department of Fish and Wildlife (CDFW);
- California Department of Forestry and Fire (CALFIRE);
- California Department of Toxic Substances Control;
- California Department of Transportation (Caltrans);
- California Department of Water Resources;
- California Emergency Management Agency;
- California Energy Commission;
- California Environmental Protection Agency (CalEPA);
- California Office of Emergency Services;
- Golden State Water Company (GSWC) Southwest System;
- West Basin Municipal Water District (WBMWD);
- Central Basin Municipal Water District (CBMWD);
- Native American Heritage Commission;
- Los Angeles County Sanitation Districts (LACSD);
- Los Angeles County Fire Department (LACoFD);
- Los Angeles County Sherriff's Department
- Los Angeles County Flood Control and Water Conservation District;
- Lawndale Elementary School District;
- Centinela Valley Union High School District;
- Los Angeles Regional Water Quality Control Board (RWQCB);
- South Coast Air Quality Management District (SCAQMD);
- Southern California Association of Governments (SCAG);
- U.S. Army Corps of Engineers (ACOE); and
- U.S. Fish and Wildlife Service (USFWS).

2.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the State CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures for any significant impacts, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The EIR prepared reviews environmental and planning documentation developed for the Project, environmental and planning documentation prepared for recent projects located within the Planning Area, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

SECTION 1.0 EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed Project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the Project's

environmental impacts and possible mitigation measures. This chapter identifies alternatives that reduce or avoid at least one significant environmental effect of the proposed Project.

SECTION 2.0 INTRODUCTION

Section 2.0 briefly describes the proposed Project, the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and summarizes comments received on the NOP.

SECTION 3.0 PROJECT DESCRIPTION

Section 3.0 provides a detailed description of the proposed Project, including the location of land uses, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, subsequent projects and activities, and a list of related agency action requirements.

SECTION 4.0 BASIS OF CUMULATIVE ANALYSIS

Section 4.0 describes the approach taken and methodology for the cumulative environmental analysis.

SECTION 5.0 ENVIRONMENTAL ANALYSIS

Section 5.0 evaluates the impacts associated with implementation of the General Plan Update. This section is organized according to issue area. Each area includes a description of the environmental and regulatory setting relative to that issue; the CEQA thresholds for the specific issue area; and the environmental impacts of the proposed Project. Implementation of General Plan Update goals, policies, and actions and their ability to reduce potential impacts are described in the Impacts and Mitigation Measures subsection.

Impacts and General Plan Update goals, policies and actions are generally organized according to the topical areas. However, an impact or General Plan Update goals, policies, or actions located within the document should not restrict it from being considered under another issue topic, even though omitted from that section. Many of the impacts relating to the General Plan Update are multi-faceted. Similarly, the goals, policies, and actions may accomplish several objectives and reduce more than one impact. It is important that decision-makers be cognizant of this fact in their consideration and use of this document. If goals, policies, and actions are altered, the affect that would have on other issues should be evaluated.

SECTION 6.0 OTHER CEQA CONSIDERATIONS

Section 6.0 discusses the potential long-term implications of the proposed action and irreversible changes on the environmental that would be caused by the proposed Project, should it be implemented. The Project's growth-inducing impacts, including the potential for economic or population growth are also discussed.

SECTION 7.0 ALTERNATIVES

Section 7.0 describes a reasonable range of alternatives to the Project that could avoid or substantially lessen the Project's significant impacts and still feasibly attain the Project's basic objectives.

SECTION 8.0 REPORT PREPARERS

Section 8.0 identifies all individuals involved in preparing the EIR.

APPENDICES

This section includes all notices and other procedural documents pertinent to the Draft EIR, as well as technical material prepared to support the analysis.

2.6 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION

The City of Lawndale circulated a Notice of Preparation (NOP) of an EIR for the Project on December 6, 2022 to trustee and responsible agencies, the State Clearinghouse, and the public. A scoping meeting was held on December 15, 2022 at 6:30 p.m. at the Harold E. Hofmann Community Center. Information regarding the scoping meeting was included in the NOP, as described above. The intent of the meeting was to share information regarding the proposed Project and the environmental review process and to receive comments regarding the scope and content of the environmental analysis to be addressed in the EIR.

No public or agency comments on the NOP related to the EIR analysis were presented or submitted during the scoping meeting. However, during the 30-day public review period for the NOP, which ended on January 5, 2023, four written comment letters were received on the NOP. A summary of the NOP comments is provided later in this chapter. The NOP and all comments received on the NOP are presented in Appendix A, *NOP and NOP Comment Letters*.

DRAFT EIR

The Draft EIR contains a description of the Project, description of the environmental setting, identification of the Project's direct and indirect impacts on the environment and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City of Lawndale will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period.

PUBLIC NOTICE/PUBLIC REVIEW

Coinciding with the NOC, the City of Lawndale will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR is forty-five (45) days. Public

comment on the Draft EIR will be accepted in written form. All comments or questions regarding the Draft EIR should be addressed to:

Jared Chavez - Community Development Manager
City of Lawndale
14717 Burin Avenue
Lawndale, CA 90260
Email: jchavez@lawndalecity.org

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to both oral and written comments received during the public review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City of Lawndale City Council will review and consider the Final EIR. If the City finds that the Final EIR is "adequate and complete," the City Council may certify the Final EIR in accordance with CEQA. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide a sufficient degree of analysis to allow decisions to be made regarding the proposed project that intelligently take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or deny the Project. If the EIR determines that the project would result in significant adverse impacts to the environment that cannot be mitigated to less than significant levels, the City Council would be required to adopt a statement of overriding considerations as well as written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. If additional mitigation measures are required (beyond the General Plan Update policies and actions that reduce potentially significant impacts, as identified throughout this EIR), a Mitigation Monitoring and Reporting Program (MMRP) would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The MMRP would be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR.

2.7 INCORPORATED BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines Section 15148, which encourages “incorporation by reference” as a means of reducing redundancy and length of environmental reports. The documents listed below, which are available for public review at the City of Lawndale, Community Development Department, at 14717 Burin Avenue, and on the City’s website: www.lawndalecity.org, are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. A brief synopsis of the scope and content of these documents is provided below.

CITY OF LAWNDALE MUNICIPAL CODE

The Lawndale Municipal Code (Municipal Code) consists of all the regulatory and penal ordinances and administrative ordinances of the City of Lawndale. The Municipal Code is one of the City's primary tools to control land uses, in accordance with the General Plan programs and policies. The City's Zoning regulations are incorporated as Title 17, *Zoning*. Zoning regulations are adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare and to provide the economic and social advantages resulting from an orderly planned use of land resources.

Municipal Code Title 15, *Buildings and Construction*, adopts the 2022 California Building Standards Code, with amendments in consideration of the City's local climactic, geological, and topographical considerations. Other relevant Municipal Code regulations include the following, among others: Title 8, *Health and Safety*; Title 10, *Vehicles and Traffic*; and Title 12, *Streets, Sidewalks, and Public Places*; and Title 13, *Public Services*.

CITY OF LAWNDALE CLIMATE ACTION PLAN

In cooperation with the South Bay Cities Council of Governments, the City of Lawndale developed a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions within the City. The City's CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years. The CAP is designed to identify community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. The CAP advances these goals and streamlines City efforts to deploy specific initiatives and programs that target the reduction of GHG emissions, while integrating these efforts with the other priorities such as economic development, regional mobility and connectivity, and improving the local air and water quality.

2.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City received four comment letters on the NOP. Copies of these letters are provided in Appendix A of this Draft EIR and the comments are summarized below.

- Southern California Association of Governments: The Southern California Association of Governments (SCAG) provides SCAG Connect SoCal Goals for discussion of consistency, non-consistency, or non-applicability, in the Draft EIR and background regarding demographic and growth forecasts. SCAG also provides mitigation measures for operational air quality impacts that the City should consider in the DEIR.
- South Coast Air Quality Management District: The South Coast Air Quality Management District (SCAQMD) recommends that the SCAQMD's CEQA Air Quality Handbook be used as guidance when preparing the DEIR air quality and greenhouse gas analyses. It is also recommended that the Lead Agency (City of Lawndale) use the CalEEMod land use emissions software to estimate pollutant emissions from typical land use development. SCAQMD recommends that criteria pollutant emissions are quantified and compared to SCAQMD's CEQA regional pollutant emissions significance thresholds and localized significance thresholds (LSTs) to determine the Proposed Project's air quality impacts. Any potential adverse air quality impacts that could occur from all

phases of the Proposed Project, and all air pollutant sources related to the Proposed Project, are to be identified. It is also recommended that the Lead Agency perform a mobile source health risk assessment to disclose the potential health risks.

- Native American Heritage Commission: The Native American Heritage Commission (NAHC) provides information on Assembly Bill (AB) 52 and Senate Bill (SB) 18 tribal consultation requirements. The NAHC recommends conducting tribal consultation early and gives recommendations for Cultural Resources Assessments.
- Rick Hinojos: Mr. Hinojos requested that the Current General Plan Land Use Map be included in the project description.

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The City of Lawndale is located in the South Bay area of Los Angeles County, approximately 10 miles southwest of downtown Los Angeles, refer to Figure 3-1, *Regional Location Map*. The City is approximately 1.9 square miles (1,241 acres) and is bounded by the City of Hawthorne to the north and west, by unincorporated areas of Los Angeles County and the City of Gardena to the east, by the City of Torrance to the south, and by the City of Redondo Beach to the south and west. Regional access to the City is provided by Interstate 405, a major north-south highway which provides access to Lawndale and the greater Los Angeles region.

The Planning Area is the geographic area for which the General Plan Update provides a framework for long-term growth and resource conservation. State law requires the Planning Area for the General Plan Update to include all territory within Lawndale's incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300). The General Plan Update Planning Area, as shown in Figure 3-2, *General Plan Planning Area*, includes the entire City limits (approximately 1,241 acres) as well as the City of Lawndale's Sphere of Influence (approximately 314 acres); the entire Planning Area is approximately 1,555 acres.

3.2 ENVIRONMENTAL SETTING

The City of Lawndale is a city of approximately 30,882 people (Department of Finance 2023). The City was incorporated in 1959, although the community's history dates back to the Rancho Era. The "town" of Lawndale was founded in 1905 and remained a predominantly agricultural community until major growth occurred after the conclusion of World War II. Lawndale incorporated in large part to fend off annexation attempts by adjoining cities and since that time it has essentially been a bedroom community, primarily of single-family homes. However, many older single-family homes have been replaced with duplexes and multi-family developments of three or more units resulting in the City having one of the highest population densities in Los Angeles County.

The City of Lawndale is a small but highly urbanized community that is primarily a residential community with well-established neighborhoods. Lawndale is dominated by single-family low density housing, e.g., single-family detached, duplex/double unit. Commercial activity is concentrated along the City's major arterial roadways, particularly along Hawthorne Boulevard.

CITY OF LAWNDALE GENERAL PLAN

The City's General Plan was last comprehensively updated in 1992, the Housing Element was updated in 2022 (in accordance with State housing law). The City's Existing General Plan Land Use Map (Figure 3-3, *Existing General Plan Land Use Map*) designates land uses within the Planning Area, which includes the City, but does not include its Sphere of Influence. Table 3-1, *Existing General Plan Land Use Designations*, summarizes land uses included in the Existing General Plan (1992 General Plan).

Table 3-1
Existing General Plan Land Use Designations

General Plan Designation	Within City Boundary		Within Sphere of Influence		Total Planning Area	
	Acres	% of Total Acres	Acres	% of Total Acres	Acres	% of Total Acres
Single-Family Low Density	11	<1%	0	0%	11	<1%
Single-Family Medium Density	41	3%	0	0%	41	3%
Multi-Family Low Density	443	36%	0	0%	443	29%
Multi-Family Medium Density	115	9%	0	0%	115	7%
General Commercial	113	9%	0	0%	113	7%
Downtown Commercial	31	3%	0	0%	31	2%
Specialty Commercial	0	0%	0	0%	0	0%
Light Industrial	21	2%	0	0%	21	1%
Open Space	20	2%	0	0%	20	1%
Public Facilities	121	10%	0	0%	121	8%
Public Facilities Overlay	n/a	0%	0	0%	n/a	0%
Other*	0	0%	229	73%	229	15%
Transportation/Utilities Related	325	26%	85	27%	410	26%
Total	***1,241***	***100%***	***314***	***100%***	***1,555***	***100%***

Note: Numbers are rounded to the nearest whole number.

* The SOI area is not included as part of the planning area for the current General Plan, and are included in the Los Angeles County General Plan.

Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.

City of Lawndale General Plan Land Use Designations

Single-Family Low Density: Permits a density range of 0-8.9 dwelling units per acre. This category is intended for single-family detached units on a minimum 5,000-square foot lot. Permits single-family detached homes and ancillary uses.

Single-Family Medium Density: Permits a density of 8.9-17.6 dwelling units per acre. This category is only intended to be applied to the areas of Lawndale where the predominate use is existing single-family units on 2,500-square foot lots. Permits single-family detached homes on 2,500-square foot lots and ancillary uses.

Multi-Family Low Density: Permits a density of 8.9 dwelling units per acre to 17.6 dwelling units per acre and allows two units on a minimum 5,000-square foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes, or any combination of the above and ancillary uses.

Multi-Family Medium Density: Permits a density range of 17.6 dwelling units per acre to 33 dwelling units per acre, on a minimum 5,000-square foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes, apartments, manufactured housing, or any combination of the above if deemed appropriate and compatible with surrounding land uses, and ancillary uses.

General Commercial: This designation provides the community with a wide variety of retail shops, restaurants, services, and office uses to meet the daily needs of the residents. The permitted floor area ratio, not to exceed 1.0, unless modified by the Hawthorne Boulevard Corridor Specific Plan.

Downtown Commercial: The purpose of this designation is to encourage urban nodes with commercial activity. This designation is applied specifically to the northerly side of the Hawthorne Boulevard and Manhattan Beach Boulevard intersection, and on the southerly side of the Marine Avenue and Hawthorne Boulevard intersection (see Hawthorne Boulevard Corridor Specific Plan).

Specialty Commercial: This designation can apply to sites that are a minimum five (5) acres in size and are located so as to be easily accessible and visible from major transportation corridors. The uses should have a central theme and attract customers from outside the City as well as within Lawndale. Examples of suitable specialty commercial uses are a complex of stores catering to major household purchases, such as furniture, appliances, carpets, etc.; a variety of factory outlet stores; or assorted entertainment and eating establishments. The floor area ratio shall not exceed 0.3.

Light Industrial: This designation permits light manufacturing, assembly, packaging, fabrication, and processing of materials into finished products rather than the conversion of raw materials. The industrial activity shall be conducted primarily within structures and outside storage areas and assembly activity should be limited. The floor area ratio shall not exceed 0.5.

Open Space: This designation includes public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas.

Public Facilities: This category includes public school sites; Atchison, Topeka and Santa Fe Railroad right-of-way; civic center; public maintenance yards; utility easements; library; and Prairie Avenue Recreation Center uses.

Public Facilities Overlay: This overlay is intended to identify existing and potential sites that are suitable for a public park, recreational facility, or any other public facility building or use. In the area adjacent to the Lawndale Civic Center, this overlay is intended to identify areas where possible expansion of City Hall and/or future public uses can occur.

LOS ANGELES COUNTY GENERAL PLAN (SOI)

East of the City Limits (east of Prairie Avenue) is the Los Angeles County unincorporated community of El Camino Village, which is within the City's Sphere of Influence. El Camino Village is primarily a densely developed, single-family residential community with commercial uses along Crenshaw Boulevard. The

area is approximately 314 acres and is entirely built-out. Although parts of El Camino Village share a Lawndale zip code (90260), the City has historically not provided services to the community.

The SOI area is not included in the planning area for the Current General Plan, and is in unincorporated Los Angeles County. Below are the applicable Los Angeles County General Plan Land Use designations, which are included in the SOI area.

Residential 9 (H9): Single family residences, 0-9 dwelling unit (du)/net acre.

Residential 18 (H18): Single family residences, two family residences, 0-18 du/net acre.

Residential 30 (H30): Single family residences, two family residences, multifamily residence, 0-30 du/net acre.

General Commercial (CG): Local-serving commercial uses, including retail, restaurants, and personal and professional services; single family and multifamily residences; and residential and commercial mixed uses, 0-50 du/net acre.

Public and Semi-Public (P): Public and semi-public facilities and community-serving uses, including public buildings and campuses, schools, hospitals, cemeteries, and fairgrounds; airports and other major transportation facilities.

Water (W): Bodies of water, such as lakes, reservoirs, natural waterways, and man-made infrastructure, such as drainage channels, floodways, and spillways. Includes active trail networks within or along drainage channels.

HAWTHORNE BOULEVARD SPECIFIC PLAN

The Hawthorne Boulevard Specific Plan (HBSP) oversees the development of the Hawthorne Boulevard corridor and the north side of both Artesia Boulevard and Redondo Beach Boulevard (see Figure 3-4, *Hawthorne Boulevard Specific Plan Map*). The HBSP acts as a tool for implementing the goals and policies of the General Plan through the regulation of use, density, height, and other design standards to achieve the overall vision for the area. The Specific Plan was originally adopted in June 1999 and has undergone various amendments since its adoption. The Specific Plan includes General Commercial, Downtown Commercial, Public Facilities and Multi-Family Medium land use designations.

Hawthorne Boulevard serves as the City's primary transportation route, corridor of economic activity, and the community focal point. It has been, and continues to be, the City's central artery for circulation, commerce, employment, and social activity. Hawthorne Boulevard is oriented in a north-south direction, connecting the City of Lawndale with the cities of Hawthorne in the north and Torrance in the south.

CITY OF LAWNDALE ZONING ORDINANCE

The City's Zoning Ordinance is codified as Title 17, Zoning, of the Lawndale Municipal Code. The stated purpose of Title 17 is to designate, regulate, and restrict the location and use of buildings, structures, and land for residence, commerce, trade, industry, or other purposes; to regulate and limit the height, number of stories, and size of buildings and other structures hereafter erected or altered; to regulate and determine the size of yards and other open spaces; and to regulate and limit the density of population

and, for said purposes, to divide the city into zones of such number, shape, and area as may be deemed best suited to carry out these regulations and to provide for their enforcement, in accordance with the comprehensive general plan.

3.3 PROJECT BACKGROUND

California Government Code Section 65300 et seq. requires all counties and cities to prepare and maintain a General Plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The General Plan acts as a "constitution" for development, and is the jurisdiction's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards) are required by law to be consistent with the General Plan.

The General Plan includes the eight elements mandated by State law, including: Circulation, Conservation, Housing, Land Use, Noise, Open Space, Environmental Justice and Safety. The City's 2021-2029 Housing Element was adopted on February 7, 2022 and is not part of this update. The City may also address other topics of interest; this General Plan includes an element related to Economic Development and Community Facilities.

The California Government Code also requires that a General Plan be comprehensive, internally consistent, and plan for the long term. The General Plan should be clearly written, easy to administer, and available to all those concerned with the community's development.

State planning and zoning law (California Government Code Section 65000 et seq.) establishes that zoning ordinances are required to be consistent with the general plan and any applicable specific plans, area plans, master plans, and other related planning documents. When amendments to the general plan are made, corresponding changes in the zoning ordinance may be required within a reasonable time to ensure consistency between the revised land use designations in the general plan (if any) and the permitted uses or development standards of the zoning ordinance (Gov. Code Section 65860, subd. [c]). Thus, the Lawndale Zoning Ordinance is effectively the principal tool for implementing the City's General Plan, and by State law, must be consistent with the General Plan.

3.4 STATEMENT OF OBJECTIVES

The following objectives were identified for the proposed update to the General Plan:

1. Reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by City residents, businesses, decision-makers, and other stakeholders;
3. Protect Lawndale's existing residences, character, and sense of community;
4. Proactively plan for and accommodate local and regional growth in a responsible manner;

5. Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
6. Allow for a range of high-quality housing options;
7. Attract and retain businesses and industries that provide jobs for local residents;
8. Continue to maintain and improve multimodal transportation opportunities;
9. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
10. Address new requirements of State law; and
11. Address emerging transportation, housing, and employment trends.

3.5 PROJECT CHARACTERISTICS

The City Lawndale is preparing a comprehensive update to its existing General Plan. The updated Lawndale General Plan is expected to be adopted in 2023 and will guide the City's development, growth, and conservation through land use objectives and policy guidance. The General Plan Update is intended to be an expression of the community's vision for the City and Planning Area, and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The City will implement the General Plan Update by requiring development, infrastructure improvements, and other projects to be consistent with its policies, and by implementing the actions included in the General Plan Update.

The Lawndale General Plan Update includes a comprehensive set of goals, policies, and actions (implementation measures), organized into Elements, as well as a revised Land Use Map (refer to Figure 3-5, *General Plan Update Land Use Map*). The goals and policies provide guidance to the City on how to direct change, manage growth, and manage resources over the 20-year life of the General Plan. In order to ensure that the goals and policies in the General Plan are effectively implemented, a series of actions, or implementation measures have been developed, and are presented in each Element alongside the goals and policies they implement.

- A **goal** is a description of the general desired result that the City seeks to create through the implementation of the General Plan.
- A **policy** is a specific statement that guides decision-making as the City works to achieve its goals. Once adopted, policies represent statements of City regulations. The General Plan's policies set out the standards that will be used by City staff, the Planning Commission, and the City Council in their review of land development projects, resource protection activities, infrastructure improvements, and other City actions. Policies are on-going and require no specific action on behalf of the City.
- An **action** is an implementation measure, procedure, technique, or specific program to be undertaken by the City to help achieve a specified goal or implement an adopted policy. The City

must take additional steps to implement each action in the General Plan. An action is something that can and will be completed.

Additional elements that relate to the physical development of the City will also be addressed in the General Plan Update. The degree of specificity and level of detail of the discussion of each General Plan Update Element need only reflect local conditions and circumstances. The Lawndale General Plan Update will include all of the State-mandated elements, and will address two optional topics: Economic Development and Community Facilities.

The General Plan Update is being prepared to address the requirements of State law and the relevant items addressed in Government Code Section 65300 et seq. The Lawndale General Plan Update is intended to reflect the desires and vision of Lawndale residents, businesses, the Planning Commission, and City Council.

3.5.1 GENERAL PLAN UPDATE ELEMENTS

As part of the General Plan Update, some of the elements have been renamed and reorganized, including combining topical areas, as described and summarized below.

Land Use Element

The Land Use Element designates the general distribution and intensity of residential, commercial, industrial, open space, public, and other categories of public and private land uses. The Land Use Element includes the Land Use Map, which identifies land use designations for each parcel in the Planning Area (Figure 3-5). The Land Use Element provides descriptions of land use designations and policy guidance to address the City's preferred mix of land uses, plans to manage growth, strategies to encourage land use compatibility, conservation of existing character and quality of established neighborhoods, and direction on community character and design.

Mobility Element (Circulation)

The Mobility Element correlates closely with the Land Use Element and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multi-modal transportation system. This Element is intended to facilitate mobility of people and goods throughout Lawndale by a variety of transportation modes, including bicycle, pedestrian, and transit.

Resource Management Element (Conservation, Open Space and Air Quality)

The Resource Management Element focuses on the cultural, environmental, and man-made resources and the provision of open spaces. The Element combines the State-mandated Open Space, Conservation and Air Quality Elements and provides the foundation for resource conservation in the context of the City's long-term vision for the future and land use map. The Resource Management Element also guides decision making around the community's infrastructure systems, including water supply, wastewater, flood control, solid waste collection and disposal, and storm drainage and water quality. Other public and semi-public community facilities are also addressed in this chapter, including parks and recreation.

Public Safety Element (Safety and Noise)

The Public Safety Element establishes goals, policies and actions to protect the community from risk associated with geologic, fire, and flood hazards, as well as setting standards for emergency preparedness. The Public Safety Element supports the City's participation in the Lawndale Local Hazard Mitigation Plan, County of Los Angeles All-Hazards Mitigation Plan and the Lawndale Climate Action Plan. This Element also addresses the required topics related to noise, including standards and policies to protect the community from the harmful and annoying effects of exposure to excessive noise levels. This Element includes strategies to reduce land use conflicts that may result in exposure to unacceptable noise levels.

Environmental Justice Element

The Environmental Justice Element establishes goals, policies, and actions to improve environmental conditions within the community, especially for sensitive population groups. Environmental Justice Communities are described by the California Communities Environmental Health Screen Tool (CalEnviroScreen) as areas (i.e., census tracts) of a city or county that have higher environmental burdens and vulnerabilities than other areas. The term "disadvantaged community" is a broad designation that includes any community disproportionally affected by environmental, health, and other burdens or low-income areas disproportionally affected by environmental pollution and other hazards. In relation to environmental justice, disadvantaged communities are typically those communities that disproportionately face the burdens of environmental hazards. Environmental issue areas include pollution exposure (including air quality); access to public facilities, such as public improvements, public services and community amenities; access to healthy food; safe and sanitary living conditions; opportunities and access for physical activity; and improved opportunities for civic engagement. This Element includes strategies to reduce public health risks and address environmental justice concerns of those living in disadvantaged communities.

Economic Development Element

The Economic Development Element is intended to guide the City's future policy decisions to support growing and strengthening the local economy and supporting the City's role in the South Bay regional economy. The policies contained within the Element are intertwined with those found in other elements of the General Plan.

Community Facilities Element

The Community Facilities Element guides decision making to meet the infrastructure and public services needs of business and residents. Goals, policies, and actions address the provision of services and facilities, as well as water, wastewater and communications systems, and community safety specific to police and fire services. Health and educational resources are also discussed in this Element.

Housing Element

The Housing Element is the City's primary policy guide for the maintenance, improvement, and development of housing withing Lawndale. The Element provides an indication of the need for housing in the community in terms of affordability, availability, adequacy, and accessibility. It provides a strategy to address housing needs and identifies a series of specific housing program actions to meet community

needs at all income levels for the 6th Cycle Housing Element Planning Period (2021-2029). The City's 2021-2029 Housing Element was adopted on February 7, 2022 and is not part of this update.

Existing and Proposed General Plan Elements

Existing General Plan Elements

- Land Use
- Circulation
- Housing
- Economic Development
- Open Space
- Conservation
- Air Quality Management Plan
- Safety Element
- Noise Element

General Plan Update Elements

- Land Use
- Mobility
- Housing
- Resource Management
- Public Safety
- Environmental Justice
- Economic Development
- Community Facilities

3.5.2 LAND USE DESIGNATIONS

The General Plan Land Use Map identifies land use designations for each parcel within the Planning Area (Figure 3-4). The Land Use Element of the General Plan Update defines various land use designations by their allowable uses and maximum and minimum development densities and intensities. Table 3-2, *Proposed General Plan Land Use Designations*, summarizes land uses included in the General Plan Update.

Table 3-2
Proposed General Plan Land Use Designations

General Plan Land Use Designations	Within City Boundary		Within Sphere of Influence		Total Planning Area	
	Acres	% of Total Acres	Acres	% of Total Acres	Acres	% of Total Acres
Low Density Residential	49	4%	202	64%	251	16%
Medium Density Residential	458	37%	0	0%	458	30%
High Density Residential	115	9%	0	0%	115	7%
Commercial	38	3%	18	6%	56	4%
Industrial	21	2%	0	0%	21	1%
Open Space	13	1%	0	0%	13	1%
Public Facilities	128	10%	10	3%	138	9%
Hawthorne Boulevard Specific Plan	95	8%	0	0%	95	6%
Right-of-Way	324	26%	84	27%	408	26%
Total	***1,241***	***100%***	***314***	***100%***	***1,555***	***100%***
Note: Numbers are rounded to the nearest whole number.						

The following describes the proposed land use designations for the General Plan Update.

Low Density Residential (LDR); 0 – 8.9 du/ac

The Low Density Residential land use designation provides for the development of low density single-family dwellings at a density between 0 and 8.9 dwelling units per acre.

Medium Density Residential (MDR); 9 – 17.4 du/ac

The Medium Density Residential land use designation allows for a range of housing types including single-family attached and detached units and duplex, condominiums, and townhouse at a density of between 9 and 17.4 dwelling units per acre.

High Density Residential (HDR); 17.5 – 33 du/ac

The High Density Residential land use designation provides for a variety of small-lot single-family dwelling units and multi-family dwelling units including: courtyard homes, patio homes, duplex, condominiums, townhomes, apartments, and manufactured homes at a density between 17.5 and 33 dwelling units per acre.

Housing Opportunity Overlay; 20 – 100 du/ac

The Housing Opportunity Overlay is an overlay requiring a minimum residential density of 20 dwelling units per acre and allowing for a maximum density of 100 dwelling units per acre in accordance with 2021-2029 Housing Element. For sites not utilized for Housing Opportunity Overlay uses, the density range or maximum floor-area- ratio shall be as allowed in the primary land use designation.

Commercial (C)

The Commercial land use designation provides a variety of retail and service-oriented business activities, restaurants, services and office uses to meet the daily needs of the residents. There is no minimum or maximum building intensity.

Industrial (I)

The Industrial designation permits light manufacturing, assembly, packaging, fabrication and processing of materials into finishing products rather than the conversion of raw materials. Industrial activity shall be conducted primarily within structures and outside storage areas and assembly activity should be limited. There is no minimum or maximum building intensity.

Open Space (OS)

The Open Space designation includes public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas.

Public Facilities (PF)

The Public Facilities designation provides for publicly owned properties and facilities including, schools, fire stations, police stations, community centers, utility substations, water facilities, administrative offices and City government office complexes. Other uses that are determined to be compatible with primary uses may also be allowed. There is no minimum or maximum building intensity.

Hawthorne Boulevard Specific Plan (HBSP)

The Hawthorne Boulevard Specific Plan (HBSP) provides detailed policies, standards, and criteria for the area's development. Land uses within the Specific Plan area are detailed in the Specific Plan document. The Specific Plan serves as zoning for the Specific Plan area. The maximum densities and intensities of development are detailed in the Specific Plan.

3.5.3 GENERAL PLAN BUILDOUT ANALYSIS

The maximum density or intensity permitted for an individual parcel is controlled by the land use designation, unless a density bonus pursuant to Lawndale Municipal Code Chapter 17.50, *Density Bonus Provisions for Residential Units* applies. In addition to the land use designation, development of a parcel is influenced by a variety of factors including the physical characteristics of a parcel, compatibility with nearby uses, access and infrastructure limitations, market factors, and previous developments trends.

While no specific development projects are proposed as part of the Lawndale General Plan Update, the General Plan Update will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The buildout analysis assumes a 20-year planning horizon, and 2045 is to be the full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation).

Table 3-3, *General Plan 2045 Buildout by Land Use Designation*, provides a statistical summary of the buildout potential associated with the General Plan Update Land Use Map compared to existing on-the-ground conditions by General Plan Update Land Use Designation. As shown in Table 3-3, buildout of the General Plan could yield a total of up to 15,405 housing units, a population of 47,430 people, approximately 5.35 million square feet of non-residential building square footage, and 9,208 jobs within the Planning Area. As shown in Table 3-4, this represents development growth over existing conditions of up to approximately 3,942 new housing units, 9,482 people, 808,864 square feet of new non-residential building square footage and 2,738 jobs.

This page intentionally left blank.

Table 3-3
General Plan 2045 Buildout by Land Use Designation

General Plan Land Use Designations	Existing Conditions				Proposed General Plan Update (2045)				Net Change			
	Units	Pop.	NRSF	Jobs	Units	Pop.	NRSF	Jobs	Units	Pop.	NRSF	Jobs
LDR	575	2,090	0	0	420	1,537	0	0	-155	-553	0	0
MDR	5,522	19,255	126,644	199	5,534	18,404	0	0	12	-851	-126,644	-199
HDR	3,229	9,190	50,934	80	3,464	9,418	0	0	235	228	-50,934	-80
C	120	365	487,809	768	311	706	836,681	1,673	191	341	348,872	905
I	55	184	336,957	531	0	0	459,130	612	-55	-184	122,173	81
OS	0	0	0	0	27	62	0	0	27	62	0	0
PF	0	0	1,124,243	1,125	0	0	1,124,243	1,124	0	0	0	-1
HBSP	391	1,125	2,174,447	3,424	3,931	11,017	2,484,823	4,970	3,540	9,892	310,376	1,546
City Total	**9,892**	**32,209**	**4,301,034**	**6,127**	**13,688**	**41,144**	**4,904,877**	**8,379**	**3,796**	**8,935**	**603,843**	**2,252**
LDR	1,569	5,734	0	0	1,717	6,286	0	0	148	552	0	0
C	2	5	177,631	280	0	0	382,651	765	-2	-5	205,020	485
PF	0	0	63,498	63	0	0	63,498	63	0	0	0	0
SOI Total	**1,571**	**5,740**	**241,129**	**343**	**1,717**	**6,286**	**446,149**	**829**	**146**	**546**	**205,020**	**486**
Grand Total	***11,463***	***37,948***	***4,542,162***	***6,470***	***15,405***	***47,430***	***5,351,026***	***9,208***	***3,942***	***9,482***	***808,864***	***2,738***

Notes:
SOI: Sphere of Influence
Units: Housing Units
Pop.: Population
NRSF: Non-residential square footage
Numbers are rounded to the nearest whole number.

This page intentionally left blank.

For each environmental issue addressed in Section 5.0, *Environmental Analysis*, the analysis of the General Plan Update is based on various assumptions regarding existing and future conditions in Lawndale. Unless otherwise stated, the assumptions are as specified in Table 3-4, *General Plan Update Growth Assumptions*, which are based on the General Plan 2045 Buildout shown in Table 3-3.

Table 3-4
General Plan Update Growth Assumptions

Description	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs
Existing Conditions (2022)	11,463	37,948	4,542,162	6,470
2045 General Plan	15,405	47,430	5,351,026	9,208
Net Change	+3,942	+9,482	+808,864	+2,738

3.6 USE OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the General Plan Update.

3.6.1 CITY OF LAWNDLAE

The City of Lawndale is the lead agency for the proposed Project. The City of Lawndale General Plan Update will be presented to the Planning Commission for review and recommendation and to the City Council for comment, review, and consideration for adoption. The City Council has the sole discretionary authority to approve and adopt the General Plan Update. In order to approve the proposed Project, the City Council would consider the following actions:

- Certification of the General Plan EIR;
- Adoption of required CEQA findings and Statement of Overriding Considerations for the above action, if required;
- Adoption of a Mitigation Monitoring and Reporting Program; and
- Approval of the General Plan Update.

3.6.2 SUBSEQUENT USES OF THE EIR

The policy framework set forth in the proposed General Plan Update would not result in the construction of any new development nor entitlement of any new project. All new development within the Planning Area would continue to be subject to the City's development review and approval processes (with Los Angeles County responsible for the unincorporated SOI area). Elected and appointed officials and City staff will review subsequent project applications for consistency with the General Plan and Zoning

Ordinance, and will prepare appropriate environmental documentation to comply with CEQA and other applicable environmental requirements.

Pursuant to Section 15168 of the State CEQA Guidelines, this EIR is a Program EIR. The goals, policies, actions, land use designations, and other substantive components of the General Plan constitute the "program" evaluated in this Program EIR. This EIR provides a review of environmental effects associated with implementation of the proposed General Plan Update. When considering approval of subsequent activities under the proposed General Plan Update, the City of Lawndale would utilize this EIR as the basis in determining potential environmental effects and the appropriate level of environmental review, if any, of a subsequent activity. Projects or activities successive to this EIR may include, but are not limited to, the following:

- Approval and funding of major projects and capital improvements;
- Future Specific Plan, Planned Unit Development, or Master Plan approvals, including the Hawthorne Boulevard Specific Plan;
- Revisions to the Lawndale Municipal Code (Title 8 – Health and Safety, Title 16 – Subdivisions, and Title 17 – Zoning) Update
- Development plan approvals, such as tentative subdivision maps, variances, conditional use permits, and other land use permits;
- Development Agreements;
- Property rezoning consistent with the General Plan;
- Permit issuances and other approvals necessary for public and private development projects; and
- Issuance of permits and other approvals necessary for implementation of the General Plan.

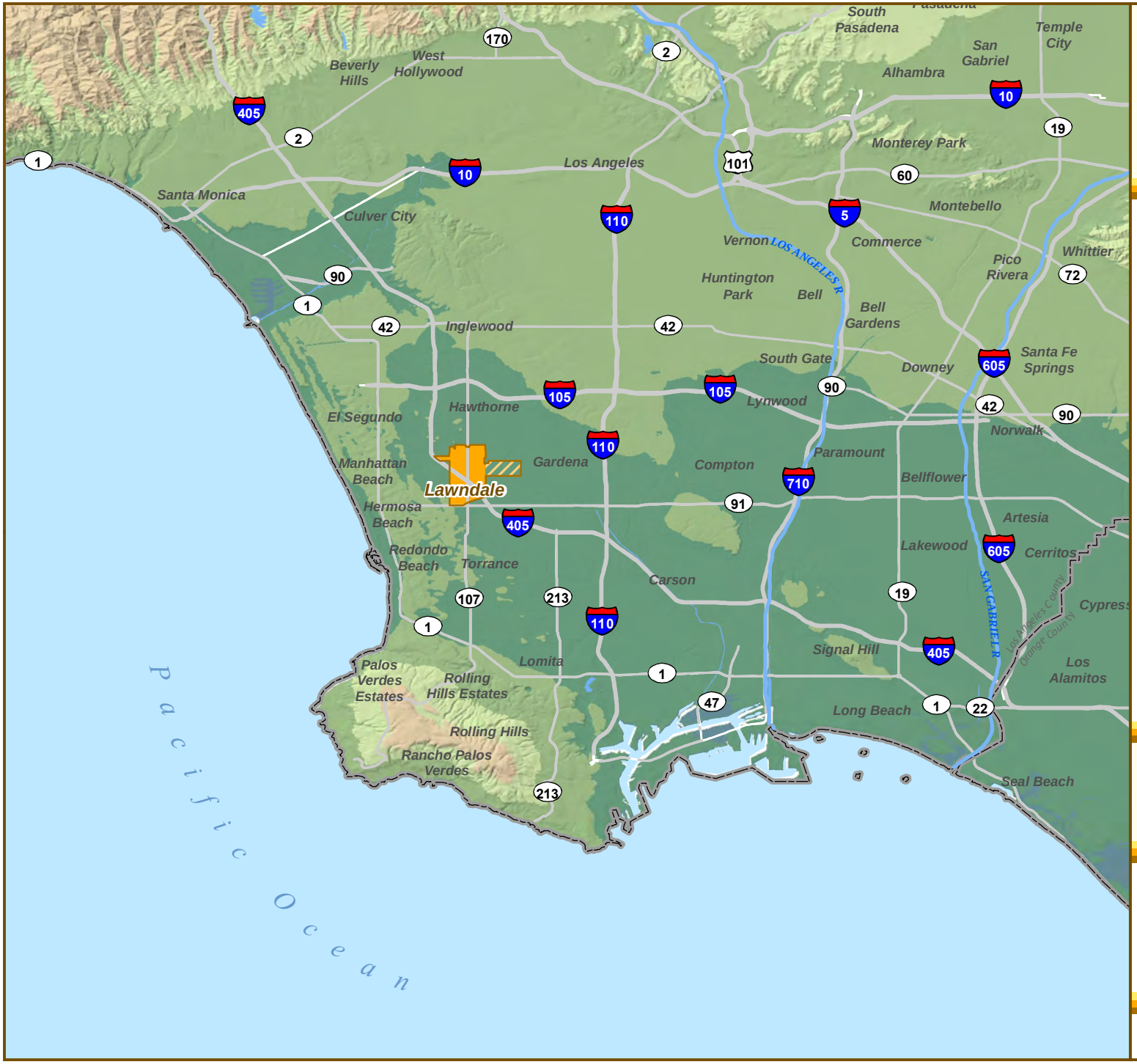
3.6.3 OTHER GOVERNMENT AGENCY APPROVALS

Subsequent projects and other actions to support implementation of the General Plan Update would require actions, including permits and approvals, by other public agencies that may include, but are not necessarily limited to:

- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to Fish and Game Code. Approval of any future potential take of State-listed wildlife and plant species covered under the California Endangered Species Act.
- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting State highway facilities.
- Regional Water Quality Control Board (RWQCB) approval for National Pollution Discharge Elimination System compliance, including permits and Storm Water Pollution Prevention Plan approval and monitoring.

- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of Federally listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act.

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3-1.
Regional Location Map

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- County Boundary

0 2 4
Miles

Sources: California State Geoportal.
Date: November 18, 2022.

City of Lawndale
The heart of the Southbay

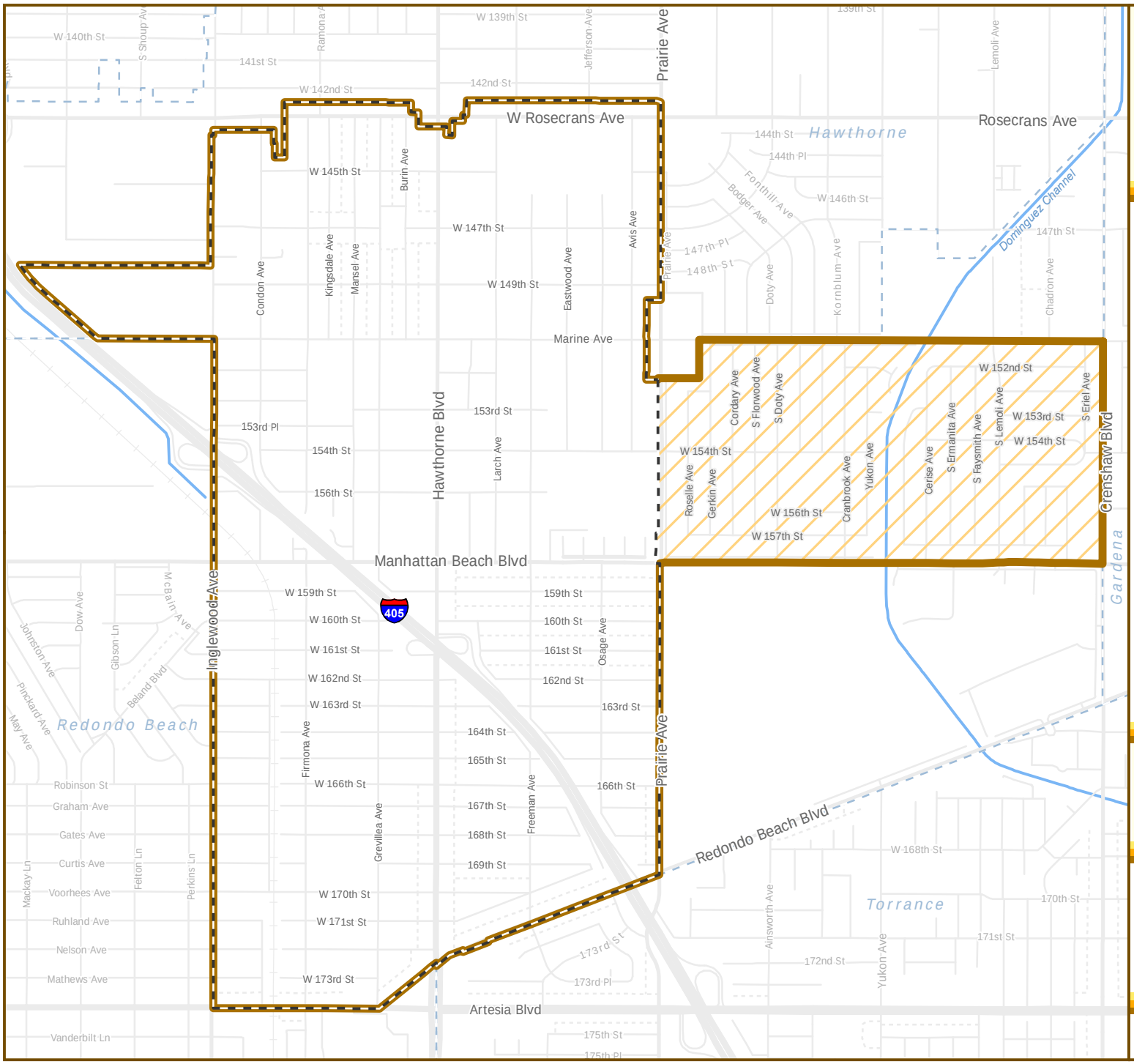
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3-2. General Plan Planning Area



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 22, 2023.

City of Lawndale
The heart of the Southbay

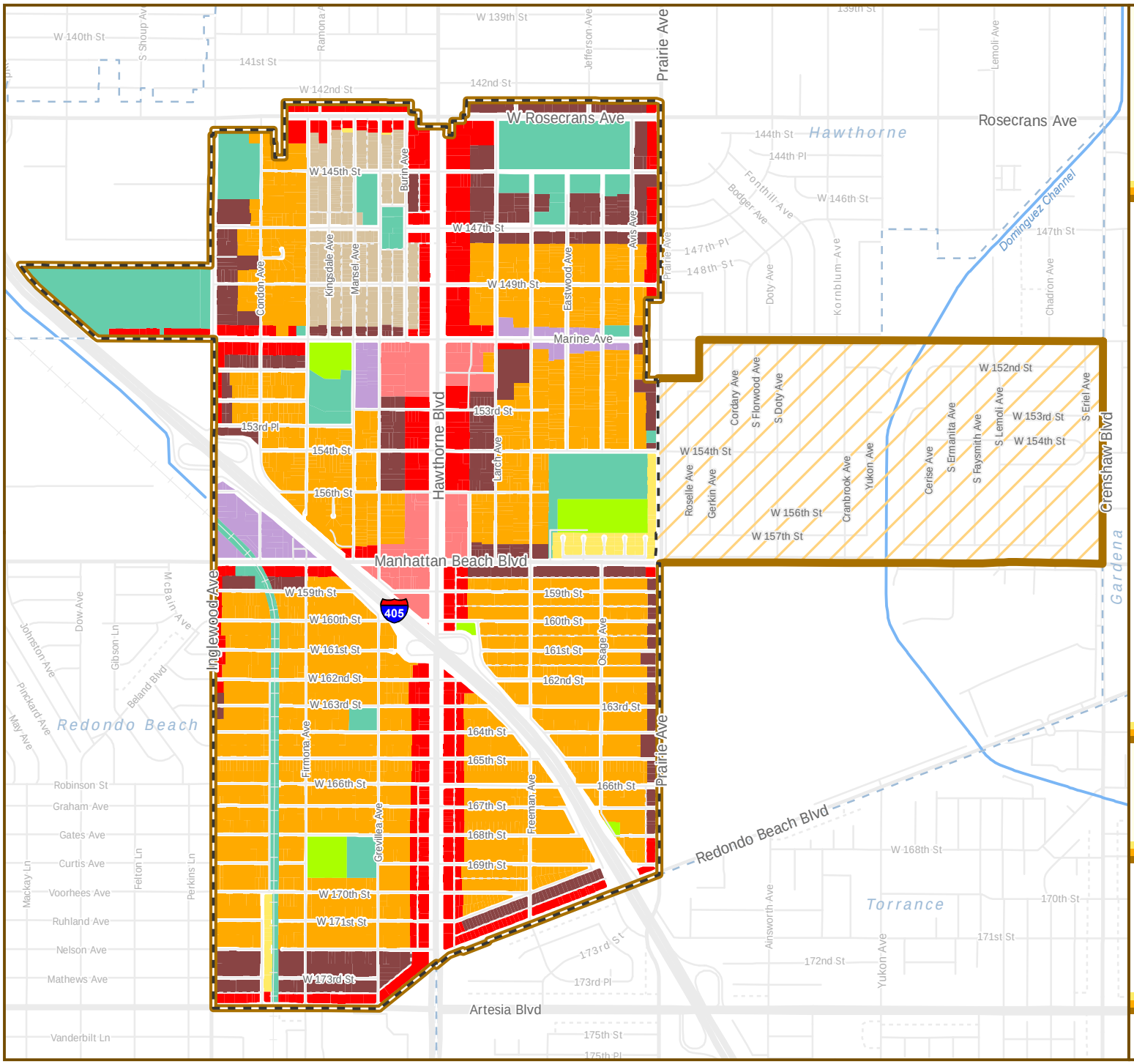
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3-3. Existing General Plan Land Use Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

General Plan Land Use

- Residential Single Family Low
- Residential Single Family Medium
- Residential Multiple Family Low
- Residential Multiple Family Medium
- Commercial
- Downtown Commercial
- Industrial
- Open Space
- Public Facilities/Schools

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 22, 2023.

City of Lawndale
The heart of the Southbay

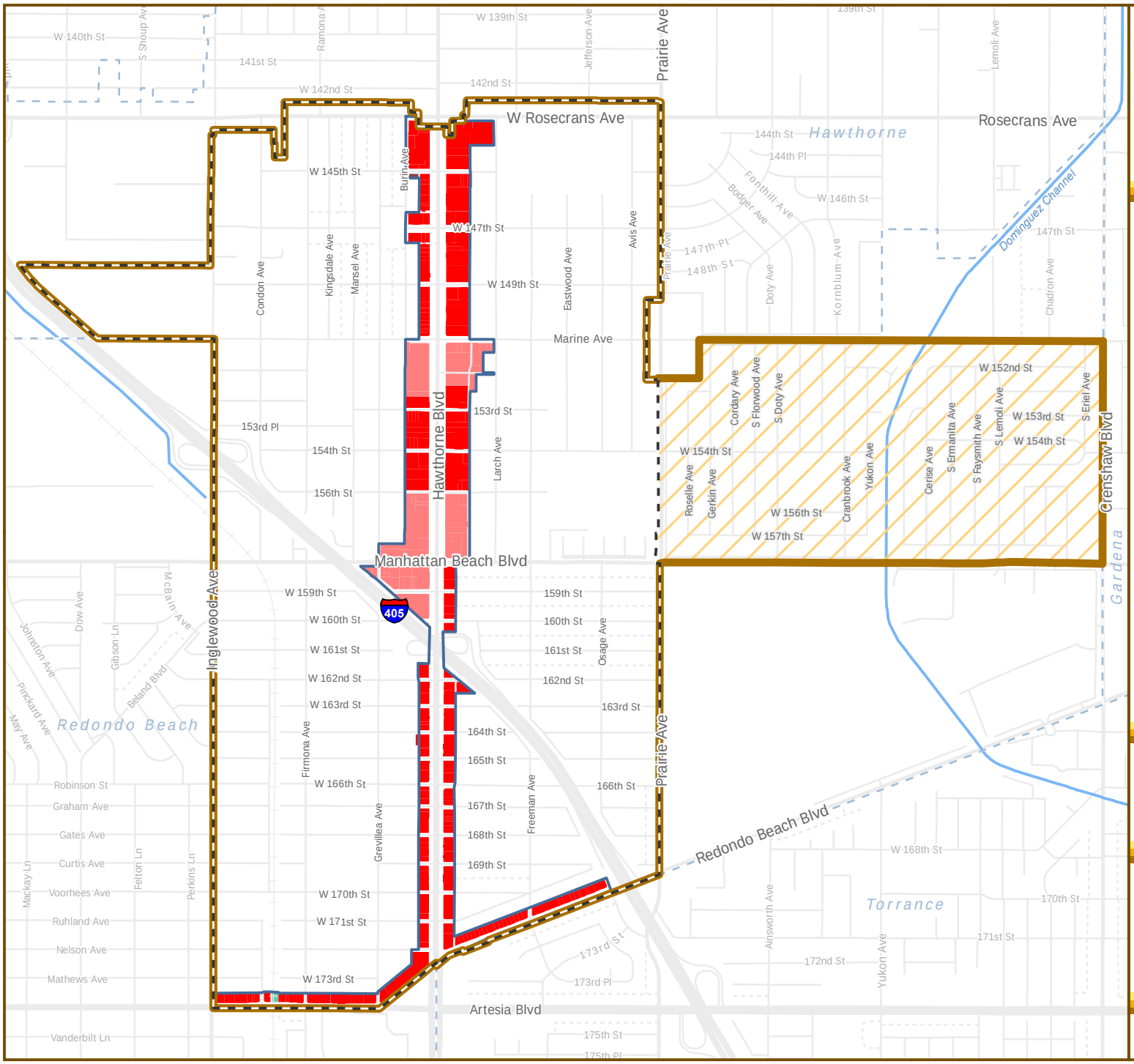
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3-4. Hawthorne Boulevard Specific Plan Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Hawthorne Boulevard Specific Plan Boundary
- Commercial
- Downtown Commercial
- Public Facilities/Schools
- Residential Multiple Family Medium

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 22, 2023.

City of Lawndale
The heart of the Southbay

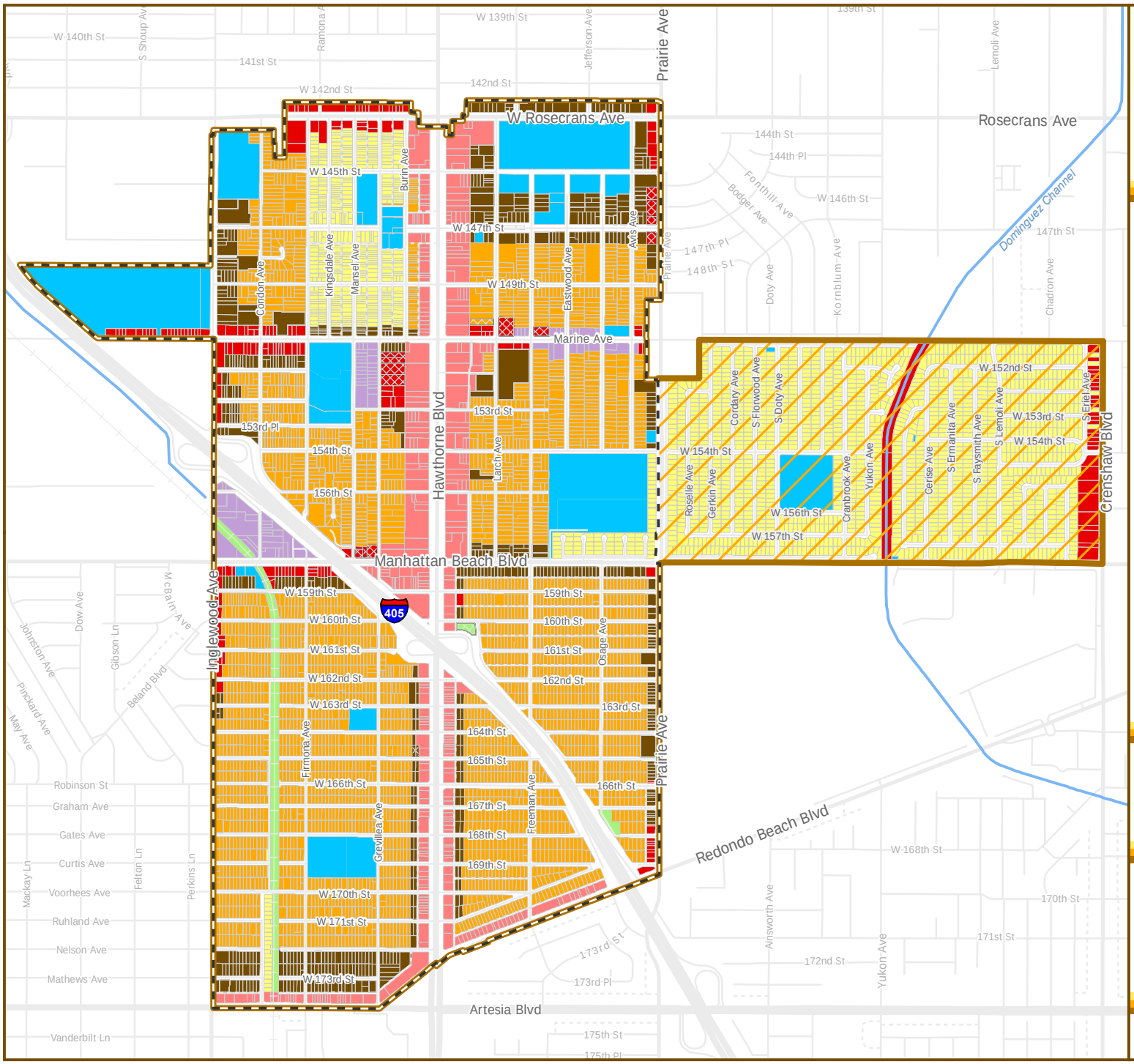
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3-5. General Plan Update Land Use Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Assessor Parcel Boundary
- Low Density Residential (LDR)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- Housing Opportunity Overlay (HOO)
- Commercial (C)
- Industrial (I)
- Open Space (OS)
- Public Facilities (PF)
- Hawthorne Boulevard Specific Plan (HBSP)

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 22, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

4.0 BASIS OF CUMULATIVE ANALYSIS

4.1 INTRODUCTION

This section analyzes potential impacts resulting from reasonably foreseeable growth, including the Lawndale General Plan Update (Project).

CEQA Guidelines Section 15355 defines cumulative impacts as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." The following elements are necessary in an adequate discussion of cumulative impacts, as noted in Sections 15130(b) through 15130(e) of the CEQA Guidelines:

> *(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary to an adequate discussion of significant cumulative impacts:*
>
> > *(1) Either:*
> >
> > > *(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,*
> > >
> > > *(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.*
> >
> > *(2) When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*

(3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

(4) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

(5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

(c) With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

(d) Previously approved land use documents such as general plans, specific plans, and regional transportation plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.

(e) If a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j).

4.2 CUMULATIVE ANALYSIS IN THIS EIR

A cumulative impact is an impact created by the combination of the project evaluated in the EIR and other reasonably foreseeable projects or actions. CEQA Guidelines Section 15130 requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." Used in this context, cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with effects of past projects, other current projects, and probable future projects.

Cumulative impacts may be discussed in terms of impacts resulting from the General Plan Update, in combination with impacts anticipated for future development (including approved and planned development within the Planning Area and surrounding affected area), and impacts associated with growth within the greater region. Where the incremental effect of a project is not "cumulatively considerable," a lead agency need not consider that effect significant but must briefly describe its basis for concluding that the effect is not cumulatively considerable. The geographic area for each impact varies, depending on the nature of the impact, whether it is regional, such as air quality or greenhouse gas emissions, or local, such as noise or aesthetics.

Quantification can pose as a challenge for cumulative impacts, as it requires speculative estimates of impacts including, but not limited to the following: the geographic diversity of impacts (impacts of future development may affect different areas); variations in time of impacts; and data for buildout projections may change following subsequent approvals. However, every attempt has been made herein to make sound qualitative judgments of the combined effects of, and relationship between, land uses and potential environmental impacts.

This EIR assesses the overall environmental effects of the General Plan Update at a program level of detail. This EIR evaluates the overall (cumulative) effects of development in accordance with the community development types, land use assumptions, and all goals and policies contained in the General Plan Update. The environmental analyses in Sections 5.1 through 5.20 of this EIR consider Project impacts in combination with regional impacts, where applicable, that could be expected as other cities within the greater Los Angeles region approach 2045.

In compliance with CEQA Guidelines Section 15130(1)(b), this section of the EIR describes the environmental effects of the General Plan Update in combination with the effects of regional growth, as forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy, adopted by SCAG's Regional Council on September 3, 2020. It is important to note that the SCAG projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan Update, and other factors, Lawndale could capture either more or less of expected regional growth than forecasted by SCAG.

Table 4.1, *Los Angeles County Growth Projections*, summarizes household, population, and employment growth forecasts for the County. The Project considers growth patterns for the year 2045, consistent with the SCAG forecasts. Using a consistent buildout year (2045) allows for better growth projection comparisons. As shown in Table 4-1, SCAG forecasts Los Angeles County's population will grow to 11,674,000 persons by 2045, an increase of approximately 19 percent over the existing 2022 population estimate of 9,834,503 persons. The number of households in the Los Angeles County region is projected to increase from approximately 3,446,205 households in 2022 to 4,119,000 households in 2045. Employment numbers are forecasted to increase from approximately 4,739,900 jobs in 2022 to 5,382,000 jobs in 2045 within the County. Section 5.14, *Population and Housing*, further elaborates on projected growth assumptions within the Planning Area as well as within Los Angeles County.

Table 4-1
Los Angeles County Growth Projections

Description	Population	Households	Jobs (Employment)
Existing Conditions (2022)[1]	9,834,503	3,446,205*	4,739,900
SCAG 2045 Forecasts[2]	11,674,000	4,119,000	5,382,000
2045 SCAG: Existing Conditions Difference	+1,839,497	+672,795	+642,100
2045 SCAG: Existing Conditions % Difference	+18.7%	+19.5%	+13.5%

Notes:
*Assumes a vacancy rate of 5.2%
Source:
1: California Department of Finance, Report E-5 Population and Housing Estimates for Cities, and Counties, and the State. January 1, 2023 and California Employment Development Department, Los Angeles County Profile, 2022.
2: Southern California Association of Governments (SCAG), *Connect SoCal, Current Context Demographics and Growth Forecast*, *Table 13 (County Forecast of Population, Households, and Employment*), September 2020.

As indicated in Section 3.0, *Project Description*, the City is forecast to have approximately 15,405 housing units by 2045 buildout, which would result in an approximate population of 47,430 persons. Therefore, the General Plan Update would facilitate the addition of 3,942 housing units through 2045 and would result in a population growth of approximately 9,482 persons in the City.

5.1 AESTHETICS

5.1.1 PURPOSE

This section identifies the existing aesthetic and light/glare conditions withing the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

Because of its inherent subjectivity, difficulties arise in the evaluation of visual quality and the degree of impact that may result from visual change. Additionally, there are limited objectives or quantitative standards to analyze visual quality and individuals respond differently to changes in the visual environment. What may be considered an adverse visual condition to one person may represent an improved visual condition to another.

CONCEPTS AND TERMINOLOGY

When viewing the same landscape, people may have different responses to that landscape and any proposed visual changes, based upon their values, familiarity, concern, or expectations for that landscape and its scenic quality. Since each person's attachment to and value for a particular landscape is unique, visual changes to that landscape inherently affect viewers differently. However, generalizations can be made about viewer sensitivity to scenic quality and visual changes. The visual sensitivity of a landscape is affected by the viewing distances at which it is seen, such as close-up or far away. The visual sensitivity of a landscape also is affected by the travel speed at which a person is viewing the landscape (high speeds on a highway, low speeds on a hiking trail, or stationary at a residence).

The same feature of a project can be perceived differently by people depending on the distance between the observer and the viewed object. When a viewer is closer to a viewed object in the landscape, more detail can be seen, and there is greater potential influence of the object on visual quality because of its form or scale (relative size of the object in relation to the viewer). When the same object is viewed at background distances, details may be imperceptible but overall forms of terrain and vegetation are evident, and the horizon and skyline are dominant. In the middle-ground, some detail is evident (e.g., the foreground), and landscape elements are seen in context with landforms and vegetation patterns (e.g., the background).

The following terms and concepts are used in this EIR section:

- **Scenic vista**. An area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. This includes any such areas designated by a Federal, State, or local agency.
- **Scenic highway**. Any stretch of public roadway that is designated as a scenic corridor by a Federal, State, or local agency.
- **Sensitive receptors**. Viewer responses to visual settings are inferred from a variety of factors, including distance, viewing angle, types of viewers, number of viewers, duration of view, and viewer activities. The viewer type and associated viewer sensitivity are distinguished among project viewers in recreational, residential, commercial, military, and industrial areas. Viewer

activities can range from a circumstance that encourages a viewer to observe the surroundings more closely (such as recreational activities) to one that discourages close observation (such as commuting in heavy traffic). Viewers in recreational areas are considered to have high sensitivity to visual resources. Residential viewers generally have moderate sensitivity but extended viewing periods. Viewers in commercial, military, and industrial areas are considered to have low sensitivity.

- **Viewshed**. The viewshed for a project is defined as the surrounding geographic area from which the project is likely to be seen, based on topography, atmospheric conditions, land use patterns, and roadway orientations.
- **Visual character** typically consists of the landforms, vegetation, water features, and cultural modifications that impart an overall visual impression of an area's landscape. Scenic areas typically include open space, landscaped corridors, and viewsheds. Visual character is influenced by many different landscape attributes including color contrasts, landform prominence, repetition of geometric forms, and uniqueness of textures among other characteristics.
- **Light and Glare.** Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Light introduction can be a nuisance. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.

  Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light on highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

5.1.2 ENVIRONMENTAL SETTING

The City of Lawndale is located in a highly urbanized area within the South Bay region of southwestern Los Angeles County. The City's topography is relatively flat with an elevation averaging 59 feet above sea level. There are some high points in the southwestern quadrant of the City that reach 100 feet above sea level. Distant mountain ranges, including the Palos Verdes Hills located approximately six miles to the south, the Santa Monica Mountains approximately 20 miles to the north, and the San Gabriel Mountains

approximately 25 miles to the northeast, contribute to the Planning Area's regional identity, while the City itself is primarily developed with limited natural or scenic resources.

The Planning Area's visual character stems largely from its urban form. Streets in the Planning Area are generally oriented in a north-south and east-west grid pattern. The City is bisected by both Interstate 405 (I-405), which runs northwest-southeast through the bottom half of the City, and Hawthorne Boulevard (SR-107), which runs north-south through the center of the City. Other major corridors and arterials generally define the Planning Area's edges. The Planning Area is built out and primarily comprised of established residential neighborhoods. Commercial and light industrial development is generally located along the Planning Area's corridors, particularly Hawthorne Boulevard. The Planning Area is located within an urban setting and surrounded by residential, commercial, and light industrial uses in adjacent jurisdictions, including the cities of Hawthorne, Redondo Beach, Torrance, and other unincorporated areas of Los Angeles County.

SCENIC VISTAS

Scenic views within the Planning Area include long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains. The County of Los Angeles General Plan Conservation and Natural Resources Element identifies scenic resources within the County to include hillsides, scenic viewsheds, and ridgelines, including the Santa Monica Mountains and San Gabriel Mountains (Los Angeles County 2015). As the Planning Area is located a great distance away from these scenic resources, views are highly dependent on atmospheric conditions. Additionally, views of these scenic resources are intermittent from within the Planning Area due to existing development within the Planning Area and surrounding area. Long-range views are primarily provided along the north-south corridors and at elevated locations within the Planning Area, including in the southwestern quadrant of the City, the I-405, and from multi-story buildings. Other features that contribute to the visual character within the Planning Area include public parks, the density and distribution of existing development, and the architecture of the built environment.

SCENIC HIGHWAYS

There are no Eligible or Designated State Scenic Highways within the Planning Area. The nearest officially designated State Scenic Highway is a portion of State Highway 2 that extends through the San Gabriel Mountains, beginning just north of Route 210 and the City of La Cañada Flintridge (Caltrans 2023). The portion of State Highway 2 that is officially designated as a State Scenic Highway is located approximately 25 miles northeast of the Project site. Due to this distance, the Planning Area is not within the viewshed of this State Scenic Highway. The nearest eligible State Scenic Highway is a portion of State Highway 1, just northwest of the intersection at Venice Boulevard, in the Venice Beach neighborhood of the City of Los Angeles. The portion of State Highway 1 that is eligible for designation as a State Scenic Highway is located approximately nine miles northwest of the Planning Area.

LIGHT & GLARE

Sensitive light and glare receptors in and around the Planning Area are generally represented by residential uses. During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be divided into both stationary and mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and

streetlights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination. This ambient light environment can be accentuated during periods of low clouds or fog.

The variety of urban land uses in the Planning Area are the main source of daytime and nighttime light and glare. They are typified by single- and multi-family residences, commercial structures, and streetlights. These areas and their associated human activities (inclusive of vehicular traffic) characterize the existing light and glare environment present during daytime and nighttime hours in the Planning Area. Areas along Hawthorne Boulevard and other major corridors in the Planning Area generally have more sources of glare due to increased vehicle traffic and reflective surfaces associated with increased density and building intensity in these areas.

Within the Planning Area, existing light sources generally include buildings, recreational facilities (i.e., sports fields), and nighttime safety lighting along roadways and parking lots. Interior light emanating from a structure; exterior light sources (i.e., security lighting); or, lighting to illuminate features for safety or decorative purposes may be visible within the existing landscape.

Sunlight reflecting off a reflective surface can result in glare effects and unsafe visual conditions that may interfere with the vision of motorists operating vehicles in the area or that may otherwise generally degrade scenic views. Few structures within the Planning Area exhibit highly reflective materials (i.e., taller buildings with extensive glazing), and therefore, potential glare effects are not considered to be of major concern under existing conditions.

5.1.3 REGULATORY SETTING

STATE

California Scenic Highways and Historic Parkways Program

The California Scenic Highways and Historic Parkways Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. Caltrans maintains its State Scenic Highways and Historic Parkways Program, through which segments of the State highway system are designated as being of particular scenic value or interest. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, State highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The Program is governed by the regulations found in the California Streets and Highways Code, Section 260 et seq.

California Streets and Highway Code Section 261 requires local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development;
- Provide detailed land and site planning;
- Prohibit offsite outdoor advertising and control of on-site outdoor advertising;

- Pay careful attention to and control of earthmoving and landscaping; and
- Scrutinize the design and appearance of structures and equipment.

California Streets and Highway Code Section 263 allows the California State Legislature the authority to identify highways as eligible for designation as a scenic highway. The government with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earthmoving activities along the affected segment or corridor ("Corridor Protection Program"). Caltrans must also indicate that the highway segment meets established criteria for the roadway or segment to be designated as scenic.

California Building Standards Code

Title 24 of the California Building Standards Code serves as the basis for the design and construction of buildings in California. In addition to safety, sustainability, new technology and reliability, the California Building Standards Code addresses light pollution and glare hazards through the establishment of maximum allowable backlight, up light, and glare (BUG) ratings.

LOCAL

City of Lawndale Municipal Code

Title 17 of the City of Lawndale Municipal Code contains the City's Zoning Code, and provides specific development standards that influence the City's scenic views, visual character, and restrict lighting. The Zoning Code implements the General Plan goals and policies by classifying and regulating the specific uses of land and structures within the City. The Zoning Code identifies standards that include, but are not limited to: minimum lot size and lot coverage requirements; maximum building height; minimum building setbacks; automobile storage requirements; open space and landscaping requirements; and lighting requirements.

Chapter 17.28, *Special Use Permit*, regulates the issuance of Special Use Permits (SUP). Land uses that require a SUP generally have a unique and distinct impact on the area in which they are located or are capable of impacts to adjacent properties unless given special review and conditions. SUPs may be approved, conditionally approved, or denied. Before granting a SUP, the approving body must find that the proposed project meets the conditions set forth in Section 17.28.014, *Prerequisite Conditions,* including, but not limited to, the presence of site features required to adjust the proposed use with the land and uses in the neighborhood, and consistency with the General Plan. In addition, all SUPs must meet the standard conditions set forth in Section 17.28.105, *Standard Conditions*, including, but not limited to, the provision of adequate exterior lighting for parking areas, provided such lighting does not disturb surrounding residential or commercial areas.

Chapter 17.30, *Design Review*, establishes a design review evaluation procedure that is intended to support orderly development by ensuring that proposed residential structures meet all aspects of the Zoning Code, are harmonious with the surrounding area within residential zones, and do not pose a threat to the public health, safety and general welfare of the City and its citizens. The design review procedure is decided upon by either the Community Development Director or Planning Commission, depending on the type of development and is decided according to design criteria established in Section 17.30.040,

Design Criteria, which includes, but is not limited to: building height, bulk and other design features; site layout, orientation and location of structures; illumination and landscaping; respect for natural terrain and landscape; and substantial compliance with adopted design guidelines.

Section 17.36.220, *Temporary Storage of Construction Materials*, provides aesthetic-related standards for worksites and construction staging areas, including that such areas are kept clear of trash, dirt, and debris; are adequately screened; and that, following completion of construction, the property is restored to the same or an improved condition to that which existed prior to the contractor's use for the temporary office and/or storage of materials and equipment.

Section 17.72.071, *Improvement of Parking Areas*, requires that projects abutting a residential zone or residential project must direct lighting to illuminate parking areas away from adjoining residential premises and adequately shield headlight glare.

Sections 17.48.203, *Construction Standards Regulating Apartment Houses*, and 17.48.273, *Construction Standards Regulating Apartment Houses*, provides standards applicable to apartments within the R-3 and R-4 zones, respectively. Said standards include a provision that lighting used to illuminate the premises be directed away from adjacent properties.

Section 17.60.020, *P Parking Zone—Conditions and Development Standards*, provides that lighting to illuminate parking areas be so arranged as to reflect the light away from any residential zone.

Section 17.76.140, *Commercial and Industrial Zones*, contains provisions to restrict lighting and illumination of all signs in commercial and industrial zones, and to legal, nonresidential uses in residential zones. In these zones, signs with internal or external illumination are allowed, subject to a maximum of forty watts; however, flashing, moving or sequential operation is prohibited. Additionally, all exterior lighting fixtures must be directed onto the subject property with no direct glare visible from adjoining residentially zoned and/or developed properties. The maximum allowable illumination at the subject property line is one-half foot candle.

City of Lawndale Residential Development Standards and Design Guidelines

Adopted in 2019, the City of Lawndale Residential Development Standards and Design Guidelines contains both residential development standards and design guidelines intended to improve the quality of life throughout the City's residential neighborhoods; ensure that new development is compatible with surrounding developments; and assists the public in understanding and implementing principles of design.

5.1.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to aesthetics and light/glare. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Have a substantial adverse effect on a scenic vista (refer to Impact Statement AES-1);
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (refer to Impact Statement AES-2);

- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings and/or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality (refer to Impact Statement AES-3); and/or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (refer to Impact Statement AES-4).

5.1.5 IMPACTS AND MITIGATION MEASURES

AES-1: Would the project have a substantial adverse effect on a scenic vista?

Impact Analysis: Scenic views within the Planning Area include long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains. Due to the Planning Area's relatively flat topography and distance from these scenic resources, views are highly dependent on atmospheric conditions. Additionally, views of these scenic resources are intermittent from within the Planning Area due to existing development within and surrounding the area. Long-range views are primarily provided along the north-south corridors and at elevated locations within the Planning Area.

Implementation of the Project would result in new development and intensification of existing urban uses along major corridors, including Hawthorne Boulevard. While the Project does not include any specific development proposals, the Project could facilitate future development projects at higher densities and intensities than currently exist. The City's Zoning Code would regulate development within the City, including building heights, setbacks, massing, and design and architectural regulations. Pursuant to Chapter 17.30, *Design Review*, future residential development projects would be reviewed for conformance with the City's established design criteria. Each future development project would be subject to the City's development standards, site plan and/or design review process to ensure conformance with the General Plan Update and the City's established development standards. Future development within the Sphere of Influence (SOI) that is under the County's land use control would be subject to the County's entitlement requirements, regulations, and review processes.

The General Plan Update goals, policies, and actions are intended to ensure that new development and intensification of existing urban uses within the Planning Area would not result in substantial adverse effects on a scenic vista. Proposed Land Use Element Policy LU-3.1 requires that the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area be considered during the development review process. Policy LU-3.3 requires land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses. Policy LU-3.3 requires that the scale and massing of new development provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjacent lower density neighborhoods. Policy LU-4.2 directs the development and enforcement of development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic. Policy LU-4.3 requires that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses. Action LU-3a directs the City to prepare and adopt

Objective Design Standards applicable to all new multi-family residential and mixed-use development. Action LU-3b ensures all projects are reviewed and processed per CEQA Guidelines. Action LU-4e implements the City's existing development standards, or where not in place, creates new standards (either through an update to the Zoning Code or update to the Hawthorne Boulevard Specific Plan or other regulating tool) to regulate new construction and revisions to existing buildings. In particular, new development standards would be created for higher density stand-alone residential projects and mixed-use projects to ensure that quality infill developments can be created within the areas identified for focused growth.

Although the potential for new residential development at higher densities could occur within the Planning Area, scenic vistas and resources do not readily occur within the Planning Area and long-range views are limited due to the existing topography and urbanized nature of the area. Thus, the Project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-3.1: **Surrounding Uses.** Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.3: **Code Compliance.** Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.5: **Scale and Massing.** Require that the scale and massing of new development provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjacent lower density neighborhoods.

Action LU-3a: Prepare and adopt Objective Design Standards applicable to all new multi-family residential and mixed-use development.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Policy LU-4.2: **Standards and Guidelines.** Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic.

Policy LU-4.3: **Site Planning.** Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e: Continue to implement the City's existing development standards, or create new standards, if appropriate, to regulate new construction and revisions to existing buildings. New development standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill development.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

AES-2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: As discussed above, there are no Eligible or Designated State Scenic Highways within the Planning Area. The nearest officially designated State Scenic Highway is a portion of State Highway 2 that extends through the San Gabriel Mountains, beginning just north of Route 210 and the City of La Cañada Flintridge. The portion of State Highway 2 that is officially designated as a State Scenic Highway is located approximately 25 miles northeast of the Project site. Due to this distance, the Planning Area is not within the viewshed of this State Scenic Highway. The nearest eligible State Scenic Highway is a portion of State Highway 1, just northwest of the intersection at Venice Boulevard, in the Venice Beach neighborhood of the city of Los Angeles. The portion of State Highway 1 that is eligible for designation as a State Scenic Highway is located approximately nine miles northwest of the Planning Area. Due to the distance and relatively flat intervening topography, the Planning Area is not within the viewshed of State Highway 1. As there are no officially designated or eligible scenic highways located within the viewshed of the Planning Area, implementation of the General Plan Update would not substantially damage scenic resources within a State scenic highway. No impact would occur in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

AES-3: In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis:

Public Resources Code Section 21071 defines an "Urbanized area" as:

(a) An incorporated city that meets either of the following criteria:

(1) Has a population of at least 100,000 persons.

(2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

According to the California Department of Finance, the City has a current (2023) population of 30,882. The adjacent City of Torrance has a population of 143,057. Combined, the cities have a population of 173,939, which exceeds 100,000 persons; thus, the City qualifies as being within an "Urbanized Area." Therefore, a significant impact would occur if a future development project associated with implementation of the Project conflicts with applicable zoning and other regulations governing scenic quality.

VISUAL CHARACTER – SHORT TERM

Construction activities for future development accommodated through implementation of the General Plan Update could temporarily degrade the visual character and quality of the respective development site and/or its immediate surrounding. Visible features associated with construction activities would include exposed building pads and staging areas for grading, excavation, and construction equipment. In addition, temporary structures could be located on the respective development site during various stages of construction, within materials storage areas, or associated with construction debris piles on site. Exposed trenches, roadway bedding, spoils/debris piles, and steel plates would be visible during construction of street and utility infrastructure improvements. These materials could temporarily degrade the existing visual character and quality of the respective development sites and surrounding areas.

All construction activities related to the General Plan Update would be temporary in nature and all construction equipment would ultimately be removed from individual project sites following completion of construction activities. Therefore, changes to local visual character and quality associated with construction of future development would be temporary, and impacts would be less than significant.

VISUAL CHARACTER – LONG TERM

The General Plan Update would support additional development beyond existing conditions. This development could increase residential densities and non-residential land use intensities in specific areas and could impact the City's visual character over the long-term. In general, the General Plan Update Land Use Element proposes an increase in building density and intensity areas along major corridors, including Hawthorne Boulevard, in accordance with State and regional housing and climate change goals. For instance, as shown in Table 3-3, *General Plan 2045 Buildout by Land Use Designation*, the majority of new residential development (3,540 units) is anticipated to occur within the Hawthorne Boulevard Specific Plan (HBSP) area. The HBSP would govern land uses within the HBSP area, including maximum densities and intensities of development, as well as development standards specific to the HBSP area. The proposed Land Use Element also includes the Housing Opportunity Overlay, which allows for a maximum density of 100 dwelling units per acre on sites outside of the HBSP area, in accordance with 2021-2029 Housing Element. The Project is also expected to result in an increase of 808,864 square feet of new non-residential building square footage, the majority of which is anticipated to occur within the proposed Commercial (C) land use designation and HBSP area. Refer to Section 3.0, *Project Description*, for a description of land use designations proposed under the General Plan Update. As shown in Figure 3-3 and Figure 3-5, as part of the General Plan Update, an increase in densities and intensities is proposed generally along Hawthorne Boulevard and Redondo Beach Boulevard.

The General Plan Update incorporates consistent and compatible development intensities that would maintain and enhance the overall visual character/quality of the Planning Area. Specifically, the Land Use Element includes policies and actions, maps, and diagrams to control and direct the general distribution, location, and extent of land uses within the Planning Area. For example, Policy LU-1.1 requires the provision of an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in the Land Use Element and Land Use Map. Policy LU-4.2 directs the City to develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic. Action LU-1a directs the City to create consistency between the City's Zoning Code and Zoning Map as appropriate to ensure consistency with the Land Use Element and designations shown on the Land Use Map. Action LU-1b ensures the City updates the Hawthorne Boulevard Specific Plan as appropriate to ensure consistency with the Land Use Element, designations shown on the Land Use Map, and the City's adopted 2021-2029 Housing Element. Action LU-1c directs the City to review the Zoning Code and update as appropriate to reflect Land Use goals, policies, and implementation actions included in the General Plan Update. Action LU-4e directs the implementation the City's existing development standards, or where not in place, creates new standards to regulate new construction and revisions to existing buildings. Guiding future growth and development based on the General Plan Update would ensure future development complements and protects the quality of the existing environment.

All future development would also be subject to conformance with applicable requirements in the Lawndale Municipal Code. The City's Zoning Code (Title 17) would regulate maximum building height, building setbacks, parking and garage/carport placement, landscaping and screening requirements, and other development characteristics in place in each zoning district to protect the City's long-term visual character. Pursuant to Chapter 17.30, *Design Review*, future residential development projects would be subject to project-specific design review to ensure compatibility with the site surrounding area, and consistency with design standards and guidelines (refer to Impact AES-2). Future development within the SOI that is under the County's land use control would be subject to the County's entitlement requirements, regulations, and review processes. Additionally, applicable future land use and development review applications would undergo environmental review on a project-by-project basis prior to consideration by the decision-making authority. If necessary, mitigation would be recommended to reduce potential impacts to a less than significant level.

The implementation of policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would be designed to enhance the visual quality of the area and be visually compatible with existing development and open space resources. Therefore, implementation of the General Plan Update would not substantially degrade the existing visual character or quality of public views or conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant in this regard.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Action LU-1a: Create consistency between the City's Zoning Code and Zoning Map and General Plan.

Action LU-1b: Update the Hawthorne Boulevard Specific Plan as appropriate to ensure consistency with this Land Use Element, designations shown on Figure LU-1, and the City's adopted 2021-2029 Housing Element.

Action LU-1c: Review the Zoning Code and update as appropriate to reflect Land Use goals, policies, and implementation actions included in this Plan.

Action LU-1d: As part of development review process, ensure that residential and non-residential developments fall within the minimum and maximum density requirements and/or allowed floor-area-ratios stipulated on the Land Use Map and included within the Land Use Descriptions. Projects shall also be reviewed for consistency with the development standards and density requirements established by any applicable Specific Plan governing the area in question.

Policy LU-3.3: **Code Compliance.** Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.9 **Interagency Cooperation.** Establish and maintain an ongoing liaison with Caltrans, LA Metro, utility companies, adjacent cities, and other major government and private agencies to help minimize the traffic, noise, and visual impacts of their facilities and operations.

Policy LU-4.2: **Standards and Guidelines.** Develop and enforce development standards and objective design guidelines that provide clear direction for achieving quality community design in new development and redevelopment projects consistent with the City's desired aesthetic.

Policy LU-4.3: **Site Planning.** Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e Continue to implement the City's existing development standards, or create new standards if appropriate, to regulate new construction and revisions to existing buildings. New standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill developments.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

AES-4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis: Future development accommodated through implementation of the General Plan Update could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. Light and glare impacts could result from new light sources such as street lighting, interior and exterior building lighting (including for safety purposes), vehicle headlights, illuminated signage, and new glare sources such as reflective building materials, roofing materials, and windows. These new sources of light and glare would be most visible from development along adjacent roadways, and to receptors such as residents and traveling motorists.

All lighting installed in future development projects as a result of the implementation of the General Plan Update would be subject to conformance with applicable Zoning Code requirements and guided by the General Plan Update Land Use Element, which includes policies and actions to reduce potential light and glare impacts. Land Use Element Policy LU-3.7 requires new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control. Action LU-3c directs the City to evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods. Action LU-3d requires that the City review the Zoning Code, and amend it if necessary to create standards addressing appropriate treatments to buffer nonresidential uses from residential and other sensitive uses. Action LU-3e requires as part of the development review process, the analysis of land use compatibility to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks. In addition, pursuant to Section 17.72.071, *Improvement of Parking Areas*, projects abutting a residential zone or residential project must direct lighting to illuminate parking areas away from adjoining residential premises and adequately shield headlight glare. Therefore, implementation of the General Plan Update would not result in adverse light and glare impacts. Impacts would be less than significant in this regard.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-3.7: **Development Buffers.** Require new uses to provide buffers between existing uses where potential adverse impacts could occur, such as decorative walls, setbacks and landscaping, restricted vehicular access, parking enclosures, and lighting control.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Action LU-3d: Review the Zoning Code, and amend it if necessary, to create standards addressing appropriate treatments to buffer nonresidential uses from residential and other sensitive uses.

Action LU-3e: Analyze land use compatibility through the development review process to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis,* identifies projected growth within the Planning Area with the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for aesthetics is the City.

Would the project, combined with other related cumulative projects, have a substantial adverse effect on a scenic vista?

Impact Analysis: The Planning Area does not contain any scenic vistas or scenic resources; long-range views of the Palos Verdes Hills, Santa Monica Mountains, and San Gabriel Mountains are limited and primarily provided along major north-south corridors due to the existing development within the City and surrounding area. The Planning Area, and the surrounding areas, are developed and within an urbanized area. Development and/or redevelopment of the Planning Area would be subject to the regulations and requirements of the City's Zoning Code, including building heights, setbacks, massing, and design and architectural regulations, while projects in the SOI would be subject to the County's standards and requirements. Future development projects in the City would be subject to the City's development standards, site plan and/or design review process to ensure conformance with City's established development standards. Although the potential for new development at higher densities/intensities could occur with implementation of the Project, scenic vistas and resources do not readily occur within the City and long-range views are limited due to the existing topography and urbanized nature of the area. Further, future projects implemented under the General Plan Update would be required to be consistent with the

General Plan Update policies and actions and adopted regulations pertaining to aesthetics. With implementation of the adopted policies and regulations described above, the proposed General Plan Update would not considerably contribute to permanent changes in visual character, such as obstruction of scenic views. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on visual character to a less-than-significant level. Thus, the Project's incremental effects involving the potential for substantial adverse effects on a scenic vista would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Impact Analysis: As there are no officially designated or eligible scenic highways located within the viewshed of the Planning Area, future development and cumulative development associated with implementation of the General Plan Update would not substantially damage scenic resources within a State scenic highway. Thus, the Project's incremental effects involving the potential for substantial damage to scenic resources within a State scenic highway would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, conflict with applicable zoning and other regulations governing scenic quality?

Impact Analysis: Future development and cumulative development are located within the Planning Area and are therefore within an "Urbanized Area." As discussed above, implementation of the General Plan Update would result in new development and intensification of existing urban uses along major corridors. While the Project does not include any specific development proposals, the Project could facilitate future development projects within these areas at higher densities and intensities than currently exist. Development within the City is subject to the Lawndale Zoning Code, which provides for project-specific design review of future development proposals, which would ensure that development is consistent with the General Plan Update goals, policies, and actions, and the Zoning Code. Individual development projects are reviewed subject to the specific zoning district and development being proposed. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to scenic quality. The

proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Thus, the Project's incremental effects involving potential conflicts with applicable zoning and other regulations governing scenic quality would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis: Future development associated with the General Plan Update and development in the surrounding communities could introduce new sources of light or glare with the potential to adversely affect day or nighttime views. All lighting installed in future development projects would be subject to conformance with the General Plan Update and applicable Zoning Code requirements. Additionally, pursuant to Chapter 17.30, *Design Review*, future residential development projects would be reviewed for conformance with the City's established design criteria, including project illumination. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to aesthetics. With implementation of the adopted policies and regulations described above, the proposed General Plan Update would not considerably contribute to permanent changes in visual character, such as increased lighting resulting in a substantial degradation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on lighting and glare to a less-than-significant level. Thus, through compliance with the City's established regulatory requirements, the Project's incremental effects involving the potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area would not be cumulative considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Aesthetics impacts associated with the implementation of the General Plan Update would be less than significant and no significant unavoidable aesthetics impacts would occur as a result of the General Plan Update.

5.1.8 REFERENCES

California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State, January 2021-2023*, May 2023.

California Department of Transportation (Caltrans), *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed March 14, 2023.

Los Angeles County, *Los Angeles County 2035 General Plan*, October 2015.

This page intentionally left blank.

5.2 AGRICULTURE RESOURCES

This section identifies the existing agricultural conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

5.2.1 ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

The California Department of Conservation (DOC), Division of Land Resource Protection, identifies important farmland throughout the State through its Farmland Mapping and Monitoring Program (FMMP). The FMMP is non-regulatory and was developed to inventory land and provide categorical definitions of important farmlands; and, provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The program does not necessarily reflect local General Plan actions, urban needs, changing economic conditions, proximity to market, and other factors, which may be taken into consideration when government considers agricultural land use policies.

Agriculture land, in the form of designated Important Farmlands as defined by the California DOC, makes up zero percent (no acres) of the City's total acreage (DOC 2023a). There are no lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale General Plan Land Use Maps (see Figure 3-2 and Figure 3-5).

IMPORTANT FARMLANDS

The DOC, as part of its FMMP, periodically prepares *Important Farmland Maps*, which are a hybrid of resource quality (soils) and land use information intended to document the suitability of land for agricultural production. The Los Angeles County Important Farmland Map identifies five agriculture-related categories and three non-agricultural categories:

Prime Farmland

Prime Farmland has the most favorable combination of physical and chemical features, enabling it to sustain long-term production of agricultural crops. This land possesses the soil quality, growing season, and moisture supply needed to produce sustained high yields. In order to qualify for this classification, the land must have produced irrigated crops at some point during the two update cycles prior to Natural Resources Conservation Service (NRCS) mapping. The Planning Area does not contain any Prime Farmland.

Farmland of Statewide Importance

Farmland of Statewide Importance is similar to Prime Farmland; however, it possesses minor shortcomings, such as greater slopes and/or less ability to store moisture. In order to qualify for this classification, the land must have produced irrigated crops at some point during the two update cycles prior to NRCS mapping. The Planning Area does not contain any Farmland of Statewide Importance.

Unique Farmland

Unique Farmland is of lesser quality soils used for the production of the State's leading agricultural crops. Unique Farmland includes areas that do not meet the above stated criteria for Prime Farmland or Farmland of Statewide Importance, but that have been used for the production of specific high economic value crops during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to current farming methods. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. Land must have been farmed at some time during the four years prior to the mapping date. The Planning Area does not contain any land designated as Unique Farmland.

Farmland of Local Importance

Farmland of Local Importance is vital to the local agricultural economy, as determined by the County Board of Supervisors and a local advisory committee. The County defines Farmland of Local Importance as land with the same characteristics as Prime Farmland or Farmland of Statewide Importance, with the exception of irrigation. The Planning Area does not contain any land classified as Farmland of Local Importance.

Grazing Land

Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. The Planning Area does not contain grazing land.

Urban and Built-Up Land

Urban and Built-Up Land consists of land occupied by structures with a building density of at least one unit to one and a half acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes. The entirety of the Planning Area is considered Urban and Built-Up land. Additionally, nearly all of the surrounding area is also considered Urban and Built-Up land.

Other Land

Other Land consists of land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. The Planning Area does not contain land designated as Other Land.

Water

Water consists of perennial water bodies with an extent of at least 40 acres. The Planning Area does not contain any bodies of water recognized by the FMMP.

FARMLAND PRESERVATION

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the State's agricultural lands and to prevent their premature conversion to urban uses. The Williamson Act is described in greater detail in Section 5.2.2, *Regulatory Setting*.

There are no lands within the Planning Area that are currently under a Williamson Act contract.

FORESTRY RESOURCES

Forest land is defined by Public Resources Code Section 12220(g), and includes "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

Timber land is defined by Public Resources Code Section 4526, and means "land, other than land owned by the Federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

There are no forest lands or timber lands located within the Planning Area.

5.2.2 REGULATORY SETTING

FEDERAL

Farmland Protection Policy Act

The Natural Resources Conservation Service (NRCS), an agency within the U.S. Department of Agriculture, is responsible for implementation of the Farmland Protection Policy Act (FPPA). The purpose of the FPPA is to minimize Federal programs' contribution to the conversion of farmland to non-agricultural uses by ensuring that Federal programs are administered in a manner that is compatible with state, local, and private programs designed to protect farmland. The NRCS provides technical assistance to Federal agencies, state and local governments, tribes, and nonprofit organizations that desire to develop farmland protection programs and policies. The NRCS summarizes FPPA implementation in an annual report to Congress.

Farm and Ranch Lands Protection Program

The NRCS administers the Farm and Ranch Lands Protection Program (FRPP), a voluntary program aimed at keeping productive farmland in agricultural uses. Under the FRPP, the NRCS provides matching funds to state, local, or tribal government entities and nonprofit organizations with existing farmland protection programs to purchase conservation easements. According to the 1996 Farm Bill, the goal of the program is to protect between 170,000 and 340,000 acres of farmland per year. Participating landowners agree

not to convert the land to non-agricultural use and retain all rights to use the property for agriculture. A conservation plan must be developed for all lands enrolled based upon the standards contained in the NRCS Field Office Technical Guide. A minimum of 30 years is required for conservation easements and priority is given to applications with perpetual easements. The NRCS provides up to 50 percent of the fair market value of the easement being conserved. To qualify for a conservation easement, farm or ranch land must meet several criteria. The land must be:

- Prime, Unique, or other productive soil, as defined by NRCS based on factors such as water moisture regimes, available water capacity, developed irrigation water supply, soil temperature range, acid-alkali balance, water table, soil sodium content, potential for flooding, erodibility, permeability rate, rock fragment content, and soil rooting depth;
- Included in a pending offer to be managed by a nonprofit organization, state, tribal, or local farmland protection program;
- Privately owned;
- Placed under a conservation plan;
- Large enough to sustain agricultural production;
- Accessible to markets for the crop that the land produces; and
- Surrounded by parcels of land that can support long-term agricultural production.

STATE

California Department of Conservation (DOC)

The California DOC administers and supports a number of programs, including the Williamson Act, the California Farmland Conservancy Program, the Williamson Act Easement Exchange Program (WAEEP), and the Farmland Mapping and Monitoring Program (FMMP). These programs are designed to preserve agricultural land and provide data on conversion of agricultural land to urban use. The DOC has authority for the approval of agreements entered into under the WAEEP. Key DOC tools available for land conservation planning are conservation grants, tax incentives to keep land in agriculture or open space, and farmland mapping and monitoring.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, better known as the Williamson Act (California Administrative Code Section 51200 et seq.), creates an arrangement whereby private landowner's contract with local governments to voluntarily restrict land to agricultural or related open space uses. In return, restricted parcels are assessed for property tax purposes, at a rate consistent with their actual use, rather than potential market value, which saves landowners from 20 percent to 75 percent in property tax liability each year. Local governments receive an annual subvention of forgone property tax revenues from the State via the Open Space Subvention Act of 1971 (California Government Code Section 16140-16154). Initially signed for a minimum 10-year period, the contracts are automatically renewed each year for a successive minimum 10-year period unless a notice of non-renewal is filed, or a contract cancellation is approved by the local government.

Farmland Security Zone

A Farmland Security Zone is an area created within an agricultural preserve by a board of supervisors (board) or city council (council) upon request by a landowner or group of landowners. An agricultural preserve defines the boundary of an area within which a city or county will enter into contracts with landowners. The boundary is designated by resolution of the board or council having jurisdiction. Agricultural preserves must generally be at least 100 acres in size. Farmland Security Zone contracts offer landowners greater property tax reduction. Land restricted by a Farmland Security Zone contract is valued for property assessment purposes at 65 percent of its Williamson Act valuation or 65 percent of its Proposition 13 valuation, whichever is lower.

Forest Practice Rules

The California Department of Forestry and Fire Protection (CAL FIRE) implements the laws that regulate timber harvesting on privately-owned lands. These laws are contained in the Z'berg-Nejedly Forest Practice Act of 1973 which established a set of rules known as the Forest Practice Rules to be applied to forest management related activities (i.e., timber harvests, timberland conversions, fire hazard removal, etc.). They are intended to ensure that timber harvesting is conducted in a manner that will preserve and protect fish, wildlife, forests, and streams. Under the Forest Practice Act, a Timber Harvesting Plan (THP) is submitted to CAL FIRE by the landowner outlining what timber is proposed to be harvested, harvesting method, and the steps that will be taken to prevent damage to the environment. If the landowner intends to convert timberland to non-timberland uses, such as a winery or vineyard, a Timberland Conversion Permit is required in addition to the THP. It is CAL FIRE's intent that a THP will not be approved which fails to adopt feasible mitigation measures or alternatives from the range of measures set out or provided for in the Forest Practice Rules, which would substantially lessen or avoid significant adverse environmental impacts resulting from timber harvest activities. THPs are required to be prepared by Registered Professional Foresters who are licensed to prepare these plans. For projects involving Timberland Conversion Permits, CAL FIRE acts as lead agency under CEQA, and the county or city acts as a responsible agency.

5.2.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to agricultural and forestry resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use (refer to Impact Statement AG-1);
- Conflict with existing zoning for agricultural use, or a Williamson Act contract (refer to Impact Statement AG-2);

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526, or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; and/or
- Involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use (refer to Impact Statement AG-3).

There are no forest lands or timber lands located within the Planning Area. There are also no parcels that are currently zoned as forest land, timber, or timber production. Therefore, implementation of the proposed General Plan Update would have no impact on forest land, timber, or timber production and these impacts will not be discussed further.

5.2.4 IMPACTS AND MITIGATION MEASURES

AG-1: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis: The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. As described above, the FMMP classifies the Planning Area as Urban and Built-Up Land. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP. Additionally, there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map. Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No impact would occur in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

AG-2: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis: Although the General Plan Update does not include any zone changes at this time, a future zoning update is anticipated to bring zoning into compliance with the General Plan Update. However, since the City does not have any zoning districts exclusive to agriculture uses, the General Plan Update, and subsequent zoning code update, would not conflict with existing zoning for agricultural use.

The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Planning Area does not contain land under agricultural production, nor are any parcels within the Planning Area under a Williamson Act contract. Therefore, the Project would not

conflict with existing zoning for agricultural use or conflict with a Williamson Act contact. No impact would occur in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

AG-3: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Impact Analysis: There are no forest lands within the Planning Area, nor are there suitable environmental conditions for forest land to be developed; therefore, implementation of the proposed Project will not result in the conversion of forest land to non-forest use.

The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. As described above, the Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP; there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map; and the Planning Area does not contain land under agricultural production. Thus, the General Plan Update would not result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.2.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for agricultural resources would be the Los Angeles region.

Would the project, combined with other related cumulative projects, convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact Analysis: The Planning Area is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. As described above, the FMMP classifies the Planning Area as Urban and Built-Up Land. The Planning Area does not contain any Prime Farmland, Unique Farmland, or

Farmland of Statewide Importance pursuant to the FMMP. Additionally, there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map and the Planning Area does not contain land under agricultural production. Therefore, the proposed Project would have no impact involving the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use and as a result would not contribute to a potential cumulative impact in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, conflict with existing zoning for agricultural use, or a Williamson Act contract?

Impact Analysis: The Planning Area, along with the cumulative project sites, is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. The Planning Area does not contain land under agricultural production, nor are any parcels within the Planning Area under a Williamson Act contract. Because the City does not have any zoning districts exclusive to agriculture uses, the General Plan Update, and subsequent zoning code update, would not conflict with existing zoning for agricultural use. Therefore, the proposed Project would have no impact involving a conflict with existing zoning for agricultural use, or a Williamson Act contract, and as a result would not contribute to a potential cumulative impact in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Impact Analysis: The Planning Area, along with the cumulative project sites, is located within an urbanized area and is generally developed with a mix of residential and non-residential uses. There are no forest lands within the Planning Area, nor are there suitable environmental conditions for forest land to be developed; therefore, implementation of the proposed Project will not result in the conversion of forest land to non-forest use. The Planning Area does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance pursuant to the FMMP; there are no existing lands within the Planning Area that are designated for agricultural use on the existing or proposed Lawndale Land Use Map; and the Planning Area does not contain land under agricultural production. Therefore, the proposed Project would have no impact involving the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and as a result would not contribute to a potential cumulative impact in this regard.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.2.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Agricultural impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable agricultural impacts would occur as a result of the General Plan Update.

5.2.7 REFERENCES

Department of Conservation (DOC), *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed March 6, 2023a.

Department of Conservation (DOC), *Important Farmland Categories*, https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx, accessed March 6, 2023b.

This page intentionally left blank.

5.3 AIR QUALITY

5.3.1 PURPOSE

This section identifies the existing air quality conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the air quality emissions analysis and modeling prepared by De Novo Planning Group, and included as Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

One comment was received during the NOP comment period regarding air quality. The comment was received from the South Coast Air Quality Management District (SCAQMD). The SCAQMD provides recommendations on the analysis of potential air quality impacts resulting from the proposed General Plan Update.

5.3.2 ENVIRONMENTAL SETTING

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Planning Area is located within the South Coast Air Basin (SCAB), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties, as well as all of Orange County, in addition to the San Gorgonio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and dispersion of air pollutants throughout the Basin.

LOCAL CLIMATE AND METEROLOGY

The topography and climate of southern California combine to make the SCAB an area highly favorable for forming air pollution. A warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. Within the atmosphere, the warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground. Light winds can further limit ventilation. The region also experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The annual average temperature varies little throughout much of the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With more pronounced oceanic influence, coastal areas, such as where the Project site is located, show less variability in annual minimum and maximum

temperatures compared to inland areas. The majority of the annual rainfall in the basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thunderstorms in the coastal regions and slightly heavier showers in the eastern portion of the basin along the coastal westerly side of the mountains. Year-to-year patterns in rainfall are unpredictable because of fluctuations in the weather.

Temperature inversions limit the vertical depth through which pollution can be mixed. Among the most common temperature inversions in the basin are radiation inversions, which form on clear winter nights when cold air off mountains sink to the valley floor while the air aloft over the valley remains warm. These inversions, in conjunction with calm winds, trap pollutants near the source. Other types of temperature inversions that affect the basin include marine, subsidence, and high-pressure inversions.

Summers are often periods of hazy visibility and occasionally unhealthful air. Strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloudtrap pollutants such as automobile exhaust near their source.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution “hot spots” in heavily developed coastal areas of the basin, there is not enough traffic to cause any winter air pollution problems.

The temperature and precipitation levels for the Los Angeles International Airport, the closest station with data, are in Table 5.3-1, *Metrological Summary*. Table 5.3-1 shows that August is typically the warmest month and January is typically the coolest month. Rainfall in the Planning Area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table 5.3-1
Meteorological Summary

Month	Temperature (˚F)		Average Precipitation (inches)
	Average High	Average Low	
January	65.2	47.5	2.65
February	65.3	48.9	2.67
March	65.3	50.5	1.85
April	67.4	53.0	0.77
May	69.1	56.4	0.17
June	71.9	59.7	0.05
July	75.1	62.9	0.02
August	76.3	63.8	0.07
September	76.0	62.6	0.16
October	73.6	58.5	0.39
November	70.2	52.3	1.40
December	65.9	47.9	1.82
Annual Average	70.1	55.3	12.02

Source: Western Regional Climate Center, *Period of Record Monthly Climate Summary*, https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5114, accessed on May 1, 2023.

CRITERIA POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by State and Federal laws. These regulated air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO_X), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead are primary air pollutants. Of these, CO, NO_X, SO_2, PM_{10}, and $PM_{2.5}$ are criteria pollutants. ROG and NO_X are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant O_3 is formed by a chemical reaction between ROG and NO_X in the presence of sunlight. O_3 and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Carbon Monoxide (CO). CO is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart

disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Ozone (O_3). O_3 occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" O_3 layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O_3 is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides (NO_X), and sunlight to form; therefore, VOCs and NO_X are O_3 precursors. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO_2 can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (CARB) adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal $PM_{2.5}$

standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. Environmental Protection Agency (EPA) announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. On July 8, 2016, EPA made a finding that the South Coast has attained the 1997 24-hour and annual $PM_{2.5}$ standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the Federal Clean Air Act requirements for redesignating the Basin nonattainment area to attainment.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_X. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and reactive organic gases (ROG), discussed below, are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are airborne substances capable of causing short-term (acute) and/or long-term (chronic) or carcinogenic (i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and

painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous air pollutant (HAP) is a term used in the Federal Clean Air Act (FCAA) and includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), ten pollutants have been singled out through ambient air quality data as being the most substantial health risks in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, brain and nervous system damage, and respiratory disorders.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of AB 2588 must prepare, submit, and periodically update their toxic emission inventory plans and reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene.

Diesel Particulate Matter

Diesel Particulate Matter (DPM) is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the Statewide total, with an additional 71 percent attributed to other mobile sources, such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute approximately five percent of total DPM in the State. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Online Reporting System (DOORS). PERP and DOORS allow owners or operators of portable engines and certain other types of equipment to register their equipment in order to operate them in the State without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (e.g., arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific

organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and can cause coughing, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection

threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases, such as asthma, emphysema, and bronchitis.

Because the proposed Project is a planning document that does not include exact locations, sizes, or land use type for any individual projects that would occur within the City under the General Plan Update, there are no specific sensitive locations identified with respect to the proposed Project. As a conservative estimate of impacts, sensitive receptors are anticipated to be located directly adjacent to new development.

AMBIENT AIR QUALITY

Both the EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The Federal and State ambient air quality standards are summarized in Table 5.3-2, *Federal and State Ambient Air Quality Standards* for important pollutants. The Federal and State ambient standards were developed independently, although both processes attempted to avoid health-related effects. As a result, the Federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}. The EPA signed a final rule for the Federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, and was effective as of December 28, 2015 (equivalent to the State ambient air quality eight-hour standard for ozone).

Table 5.3-2
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

Source: California Air Resources Board, 2023a.
Notes: ppm = parts per million, ug/m3 = Micrograms per Cubic Meter.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

Los Angeles County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM_{10} and $PM_{2.5}$. Los Angeles County has a national designation of either Unclassified or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$. Table 5.3-3, *State and National Attainment Status in Los Angeles County*. Table 5.3-3 presents the state and national attainment status for Los Angeles County.

Table 5.3-3
State and National Attainment Status in Los Angeles County

Criteria Pollutants	State Designations	National Designations
Ozone (O_3)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	Nonattainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	
Source: California Air Resources Board, 2023b.		

Separately, Table 5.3-4, *South Coast Air Basin Attainment Status*, lists the attainment status for the criteria pollutants in the South Coast Air Basin.

Table 5.3-4
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Deadline Date[3]
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (not attained)[4]
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[5]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[6]	NAAQS	1-Hour (0.1 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-hour (0.18 ppm) Annual (0.030 ppm)	Attainment	--
SO_2[7]	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM_{10}	NAAQS	1987 24-Hour (150 µg/m^3)	Attainment (Maintenance)[8]	7/26/2013 (attained)
	CAAQS	24-Hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A

Table 5.3-4 (continued)
South Coast Air Basin Attainment Status

Pollutant	Standard[1]	Averaging Time	Designation[2]	Attainment Deadline Date[3]
$PM_{2.5}$[9]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2021 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m3)	Nonattainment (Partial)[10]	12/31/2015
Hydrogen Sulfide (H2S)	CAAQS	1-Hour (0.03 ppm/42 µg/m3)	Attainment	--
Sulfates	CAAQS	24-Hour (25 µg/m3)	Attainment	--
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m3)	Attainment	--

Source: South Coast Air Quality Management District, *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin*, September 2018.
Notes:
[1] NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards
[2] EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.
[3] A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
[4] 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.
[5] 1997 8-hour O_3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O_3 standard is still subject to anti-backsliding requirements.
[6] New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained.

[7] The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after EPA promulgates area designations for the 2010 SO_2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
[8] Annual PM_{10} standard was revoked, effective December 18, 2006; 24-hour PM_{10} NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM_{10} maintenance plan was approved by EPA on June 26, 2013, effective July 26, 2013.
[9] Attainment deadline for the 2006 24-Hour $PM_{2.5}$ NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual $PM_{2.5}$ standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
[10] Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

Los Angeles County Monitoring

SCAQMD is divided into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The City of Lawndale is in the Southwest Los Angeles County (Area 3). The nearest air monitoring station is the LAX Hastings Station, located at 7201 W. Westchester Parkway, approximately five miles northwest of the Planning Area. Table 5.3-5, *Local Air Quality Levels*, presents the monitored pollutant levels within the vicinity.

The monitoring data presented in Table 5.3-5 shows that ozone and particulate matter (PM_{10}) are the air pollutants of primary concern in the Planning Area, which are detailed below.

Table 5.3-5
Local Area Air Quality Levels

Pollutant (Standard)	Year		
	2019	2020	2021[1]
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.082	0.117	0.059
Days > CAAQS (0.09 ppm)	0	**1**	0
Maximum 8-Hour Concentration (ppm)	0.067	0.074	0.049
Days > NAAQS (0.07 ppm)	0	**2**	0
Days > CAAQS (0.07 ppm)	0	**2**	0
Carbon Monoxide:			
Maximum 1-Hour Concentration (ppm)	1.8	1.6	1.7
Days > NAAQS (20 ppm)	0	0	0
Maximum 8-Hour Concentration (ppm)	1.3	1.3	1.3
Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.057	0.060	0.063
Days > NAAQS (0.25 ppm)	0	0	0
Sulfur Dioxide:			
Maximum 1-Hour Concentration (ppm)	0.008	0.006	0.008
Days > CAAQS (0.25 ppm)	0	0	0
Inhalable Particulates (PM_{10}):			
Maximum 24-Hour Concentration (ug/m^3)	62	43	33
Days > NAAQS (150 ug/m^3)	0	0	0

Table 5.3-5 (continued)
Local Area Air Quality Levels

Pollutant (Standard)	Year		
	2019	2020	2021[1]
Days > CAAQS (50 ug/m^3)	2 (3%)	0	0
Annual Average (ug/m^3)	19.2	22.5	17.7
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	No	**Yes**	No
Ultra-Fine Particulates ($PM_{2.5}$):[2]			
Maximum 24-Hour Concentration (ug/m^3)	--	--	--
Days > NAAQS (35 ug/m^3)	--	--	--
Annual Average (ug/m^3)	--	--	--
Annual > NAAQS (15 ug/m^3)	--	--	--
Annual > CAAQS (12 ug/m^3)	--	--	--

CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million
Source: South Coast Air Quality Management District, *Historical Air Quality Data by Year*, https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year, accessed March 3, 2023.
Notes:
1. Incomplete data due to site closure in September 2021.
2. Pollutant not monitored.

Ozone

During the 2019 to 2021 monitoring period, the State 1-hour concentration standard for ozone was exceeded for one day in 2020 at the LAX Hastings Station. The Federal and State 8-hour ozone standard was exceeded for two days in 2020 over the past three years at the LAX Hastings Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The Southwest Los Angeles County LAX Hastings Station did not record an exceedance of the State or Federal 1-hour or 8-hour CO standards for the last three years.

Nitrogen Dioxide

The LAX Hastings Station did not record an exceedance of the State or Federal NO_2 standards for the last three years.

Sulfur Dioxide

The LAX Hastings Station did not record an exceedance of the State SO_2 standards for the last three years.

Particulate Matter

During the 2019 to 2021 monitoring period, the State 24-hour concentration standard for PM_{10} was exceeded for two days (3 percent of sampled days) in 2019 at the LAX Hastings Station. Over the same time period, the Federal 24-hour and annual standards for PM_{10} have not been exceeded at the LAX Hastings.

$PM_{2.5}$ was not monitored at the LAX Hastings Station during the 2019 to 2021 monitoring period.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM_{10} and $PM_{2.5}$). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

5.3.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and $PM_{2.5}$ ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of seven members appointed by the EPA administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment

(REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, EPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents is released for public comment and public peer review by the CASAC. Members of CASAC are appointed by the EPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The committee's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutants as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standard consistent with the current California state standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO_2: The national NO_2 standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO_2 concentrations than the existing national standard.
- SO_2: On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: the national annual average $PM_{2.5}$ standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower $PM_{2.5}$ concentrations than the existing standard.
- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control

air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing and implementing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas (maintenance areas are those areas that were in nonattainment that have been redesignated to attainment, under the FCCA). Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the project, such as the Metropolitan Planning Organization, the Council of Governments, or a Federal agency. The agency making the determination is also responsible for all the requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One particular aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

California Clean Air Act

The CCAA was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the state's air quality goals, planning and regulatory strategies, and performance. CARB is the agency responsible for administering the CCAA. The CARB established ambient air quality standards pursuant to the California Health and Safety Code (CH&SC) [§39606(b)], which are similar to the Federal standards.

California Air Quality Standards

Although NAAQS are determined by the EPA, states have the ability to set standards that are more stringent than the Federal standards. As such, California established more stringent ambient air quality

standards. Federal and State ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, California has created standards for pollutants that are not covered by Federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing State and Federal primary standards for major pollutants are shown in Table 5.3-2.

Air quality standard setting in California commences with a critical review of all relevant peer reviewed scientific literature. The Office of Environmental Health Hazard Assessment (OEHHA) uses the review of health literature to develop a recommendation for the standard. The recommendation can be for no change, or can recommend a new standard. The review, including the OEHHA recommendation, is summarized in a document called the draft Initial Statement of Reasons (ISOR), which is released for comment by the public, and also for public peer review by the Air Quality Advisory Committee (AQAC). AQAC members are appointed by the President of the University of California for their expertise in the range of subjects covered in the ISOR, including health, exposure, air quality monitoring, atmospheric chemistry and physics, and effects on plants, trees, materials, and ecosystems. The Committee provides written comments on the draft ISOR. The CARB staff next revises the ISOR based on comments from AQAC and the public. The revised ISOR is then released for a 45-day public comment period prior to consideration by the Board at a regularly scheduled Board hearing.

In June of 2002, CARB adopted revisions to the PM_{10} standard and established a new $PM_{2.5}$ annual standard. The new standards became effective in June 2003. Subsequently, staff reviewed the published scientific literature on ground-level ozone and nitrogen dioxide and CARB adopted revisions to the standards for these two pollutants. Revised standards for ozone and nitrogen dioxide went into effect on May 17, 2006 and March 20, 2008, respectively. These revisions reflect the most recent changes to the CAAQS.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the state. Rather than mandating the use of specific technology or the reliance on a specific fuel, CARB's motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations which required auto manufacturers to phase in less polluting vehicles.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities. The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate [I] 405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including

siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day."

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for the CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted EPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

The AB 2588 requires that existing facilities that emit toxic substances above a specified level prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures. CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators). In February 2000, CARB adopted a new public-transit bus-fleet rule and emission standards for new urban buses. These rules and standards provide for (1) more stringent emission standards for some new urban bus engines, beginning with 2002 model year engines; (2) zero-emission bus demonstration and purchase requirements applicable to transit agencies; and (3) reporting requirements under which transit agencies must demonstrate compliance with the urban transit bus fleet rule. Other recent milestones include the low-sulfur diesel-fuel requirement, and tighter emission standards for heavy-duty diesel trucks (2007) and off-road diesel equipment (2011) nationwide.

LOCAL

South Coast Air Quality Management District (SCAQMD)

SCAQMD shares responsibility with CARB for ensuring that all State and Federal ambient air quality standards are achieved and maintained over an area of approximately 10,743 square miles. This area includes all of Orange County and Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

SCAQMD reviews projects to ensure that they do not (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay the timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan.

SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout SCAB. In coordination with the Southern California Association of Governments (SCAG), SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for SCAB. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the national and/or California ambient air quality standards.

In 2003, an AQMP was prepared by SCAQMD to bring SCAB, as well as portions of the Salton Sea Air Basin under the SCAQMD jurisdiction, into compliance with the 1-hour ozone and PM_{10} national standards. The 2003 AQMP also replaced the 1997 attainment demonstration for the Federal CO standard and provided a basis for a maintenance plan for CO for the future. It also updated the maintenance plan for the Federal NO_2 standard, which SCAB has met since 1992.

A subsequent AQMP for the Basin was adopted by the SCAQMD on June 1, 2007. The goal of the 2007 AQMP was to lead SCAB into compliance with the national 8-hour ozone and $PM_{2.5}$ standards. The 2007 AQMP outlined a detailed strategy for meeting the national health-based standards for $PM_{2.5}$ by 2015 and 8-hour ozone by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporated significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions were to be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate-forming emissions.

SCAQMD approved the 2012 AQMP on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and updated emission inventory methodologies for various source categories. The 2012 AQMP outlines a comprehensive control strategy that meets the requirement for expeditious progress toward attainment with the 24-hour $PM_{2.5}$ Federal ambient air quality standard with all feasible control measures and demonstrates attainment of the standard by 2014. The 2012 AQMP also updates the 8-hour ozone control plan with new emission reduction commitments from a set of new control measures that implement the 2007 AQMP's Section 182 (e)(5) commitments. The goal of the Final 2012 AQMP is to lead the Basin into compliance with the national 8-hour ozone and $PM_{2.5}$ standards.

SCAQMD approved the Final 2016 AQMP on March 3, 2017. The 2016 AQMP includes transportation control measures developed by SCAG from the 2016–2040 RTP/SCS, as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the Federal ozone standard established by the EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NO_X technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard.

SCAQMD has also prepared the 2010 Clean Communities Plan (Formerly the Air Toxics Control Plan), the Air Quality Monitoring Network Plan, the Vision for Air: A Framework for Air Quality and Climate Plan.

SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the basin by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that (1) limit the emissions that can be generated by various uses and activities; and (2) identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules regulate the emissions of not only the Federal and state criteria pollutants, but also TACs and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules that may be applicable to future development projects within the City are Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), Rule 1138 (Control of Emissions from Restaurant Operations), Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 401 restricts the emissions of air contaminants that significantly reduce air opacity. Rule 402 restricts discharges that cause nuisance to the public. Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM_{10} emissions during grading and construction activities. Rule 1113 requires reductions in the VOC content of coatings. Rule 1138 specifies PM and VOC emissions and odor control requirements for some kinds of commercial cooking operations. Rule 1146.2 restricts the NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined by this rule. Compliance with SCAQMD Rule 1403 requires the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and to provide notification to the SCAQMD prior to commencing demolition activities.

SCAQMD's CEQA guidelines are voluntary initiatives recommended for consideration by local planning agencies. The CEQA *Air Quality Handbook* (Handbook) published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts. SCAQMD is currently updating some of the information and methods in the Handbook, such as the screening tables for determining the air quality significance of a project and the on-road mobile source emission factors. While this process is underway, SCAQMD recommends using other approved models to calculate emissions from land use projects, such as CalEEMod.

SCAQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* considers impacts on air quality sensitive receptors from TAC-emitting facilities. SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for air quality sensitive receptors proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry-cleaning facilities).

Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

SCAG is the metropolitan planning organization (MPO) for the region in which the City is located. On September 3, 2020, SCAG's Regional Council approved and fully adopted Connect SoCal (2020 Regional

Transportation Plan/Sustainable Communities Strategy)., which is an update to the previous 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The 2020RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita vehicle miles traveled (VMT). Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (similar to VOCs), CO, NO_X, and $PM_{2.5}$.

SCAG's 2020RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for Federal and State funding, and to expand the potential for all people to use active transportation.

Los Angeles County General Plan

The Los Angeles County General Plan 2035 provides a comprehensive set of goals, policies, and implementing programs to guide the County's growth. The County's General Plan includes Chapter 8, Air Quality Element, which summarizes air quality issues and outlines the goals and policies in the General Plan to improve air quality and reduce GHG emissions.

City of Lawndale Climate Action Plan

The City of Lawndale, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce Greenhouse Gas (GHG) emissions within the City. The CAP identifies community-wide strategies to lower GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste. Chapters 6 and 7 focus on land use and transportation strategies to improve air quality by reducing transportation-related emissions.

5.3.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Consistent with Appendix G of the CEQA Guidelines and the SCAQMD thresholds of significance, the project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact Statement AQ-1);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (refer to Impact Statement AQ-2);
- Expose sensitive receptors to substantial pollutant concentrations (refer to Impact Statement AQ-3); and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (refer to Impact Statement AQ-4).

METHODOLOGY AND ASSUMPTIONS

A brief discussion of the methodology and assumptions used to estimate proposed Project's air pollutant emissions is provided below. For further detail on air emissions modeling parameters and assumptions, and other related calculations; refer to Appendix B, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

Construction

Construction of the growth anticipated by implementation of the General Plan Update would have the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, such as excavators, cranes, and forklifts, and through vehicle trips generated from workers and haul trucks traveling to and from project sites. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Construction emissions of VOC, NO_x, CO, SO_2, PM_{10} and $PM_{2.5}$ are included in this analysis. Construction emissions can vary substantially from day-to-day, depending on the intensity and specific type of construction activity. The maximum daily regional emissions are predicted values for the worst-case day and do not represent the emissions that would actually occur during every day of construction.

The proposed General Plan Update is a planning-level document, and, as such, there are no specific projects, project construction dates, or specific construction plans identified. Therefore, quantification of emissions associated with buildout cannot be specifically determined at this time. However, the type and size of total anticipated growth is known. Construction emissions are based on the type and amount of off-road construction equipment and the scope of future development that could be allowed under the General Plan Update. Therefore, since CalEEMod provides default construction scenarios based on size and land use type, a reasonable worst case annual construction scenario was analyzed to provide an idea of daily emissions that could occur due to construction under the proposed Project.[1] Due to the urbanized

[1] Note that CalEEMod estimates daily emissions based on the size and type of the development, the number of days that would be needed to complete the activity (CalEEMod default), and the amount of equipment that would be needed to accomplish construction (CalEEMod default).

and built-out nature of the City, the relatively flat topography, and that future growth would primarily occur and infill and redevelopment, soil grading activities are anticipated to balance on-site. Buildout of the General Plan Update (based on the land use assumptions provided by the proposed Project) expected to occur by 2045 were modeled in CalEEMod.[2]

Construction was estimated to begin in October of 2023 and continue throughout 2045. Emission calculations assumed construction in 2023 as a conservative peak emissions year. In a year later, construction emissions would be less because cleaner construction equipment and vehicle fleet mix are expected as a result of State regulations that require cleaner construction equipment to be phased-in for heavy-duty equipment. Thus, construction emissions occurring in later years would be less than the impacts disclosed herein.

Construction activities were modeled to include site preparation, excavation/grading, building construction, paving, and architectural coating. CalEEMod defaults were used to determine construction equipment based on the type of construction. Modeling assumed the land uses contained in Table 3-4 of Section 3.0, *Project Description*.

Daily regional criteria air pollutant emissions for the different phases of construction were forecast based on construction activities, on-road and off-road mobile sources, and fugitive dust emission factors associated with the specific construction activity. Off-road mobile source emissions would result from the use of heavy-duty construction equipment such as bulldozers, loaders, and cranes. These off-road mobile sources emit VOC, NO_x, CO, SO_2, PM_{10} and $PM_{2.5}$. The emissions were estimated using CalEEMod (v.2022.1) software, an emissions inventory software program recommended by SCAQMD. CalEEMod is based on outputs from the OFFROAD model and Emission Factor (EMFAC) model, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, heavy-duty off-road equipment, and on-road vehicles. Activities parameters, such as number of equipment and equipment usage hours were included.

Fugitive dust emissions (using PM_{10} as a surrogate) during construction activities were estimated in CalEEMod, which are based on the methods described in the EPA AP-42 Compilation of Air Pollutant Emission Factors. During the application of architectural coatings, evaporation of solvents contained in surface coatings result in VOC emissions. CalEEMod was used to calculate VOC emissions based on the building surface area and the default VOC content provided by the air district or CARB's statewide limits.

On-road mobile sources during construction also have the potential to generate temporary criteria air pollutant emissions through worker vehicles and haul trucks traveling to and from project sites during construction. Mobile source emissions were calculated using trips and VMT data in the Transportation Impact Assessment developed for the proposed Project (Kittelson & Associates 2023). CalEEMod default trip lengths were used.

[2] For the sake of a conservative analysis, the modeling for both project construction and operational phases account for total development that is projected to exist in the Planning Area at 2045 buildout, which includes both current development and all development that would occur in the Planning Area in year 2045. This acts as a proxy for the 'worst-case scenario' for the purposes of CEQA analysis.

Operational

Operation of development contemplated by the General Plan Update would generate criteria air pollutant emissions from vehicle trips throughout the City, energy sources, such as natural gas combustion, and area sources, such as operation of landscaping equipment and use of consumer products, including solvents used in non-industrial applications which emit VOCs during their product use, such as cleaning supplies, kitchen aerosols, cosmetics, and toiletries. Operational impacts were assessed for the General Plan Update buildout year of 2045, inclusive of all development within Lawndale projected to exist at that time. Daily maximum criteria air pollutant emissions were compared with the SCAQMD operational thresholds to determine the operational impacts of the General Plan Update.

The operational area emissions from the future development accommodated by the General Plan Update were estimated using the CalEEMod software. Area source emissions are based on hearth emissions, architectural coatings, landscaping equipment, and consumer product usage rates provided in CalEEMod. CalEEMod default values were used for area source emissions except that wood stoves and wood fireplaces were removed from the emissions calculations as they are not permitted within SCAQMD's jurisdiction.

Intersection Hot Spots

Operation of the future development accommodated under the General Plan Update has the potential to generate traffic congestion and increase delay times at intersections within the Planning Area. The pollutant of primary concern when assessing the General Plan Update's impacts at local intersections is carbon monoxide because an elevated concentration of CO tends to accumulate near areas of heavy traffic congestion and where average vehicle speeds are low. Tailpipe emissions are of concern when assessing localized impacts of CO along paved roads.

An adverse concentration of CO, known as a "hotspot," would occur if there was an exceedance of the NAAQS or CAAQS. SCAQMD does not currently have guidance for conducting intersection hot spot analysis. However, Caltrans has guidance for evaluating CO hot spots in their Transportation Project-Level Carbon Monoxide Protocol (CO Protocol). Detailed guidance discussing which modeling programs to use, calculating emission rates, receiver placement, calculating 1-hour and 8-hour concentrations, and utilizing background concentrations are provided in the Caltrans' CO Protocol.

The potential for future development accommodated by the General Plan Update to cause or contribute to CO hotspots is evaluated by comparing Project intersections' volume data from the Transportation Impact Assessment (Kittelson & Associates 2023) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations.

Toxic Air Contaminant Impacts (Construction and Operation)

Construction and operational activities have the potential to result in health risk impacts (cancer, or other acute or chronic conditions) related to TACs exposure from airborne emissions, specifically the emissions of DPM. Health risk from TACs exposure is a cumulative localized impact-based exposure of nearby sensitive receptors to specific construction activities as well as on location to the construction and operational activities that emit TACs. To determine the magnitude of health risks associated with TACs

exposure, a Health Risk Assessment (HRA) is required. HRAs include dispersion modeling of TACs and in order to determine the specific numerical cancer and non-cancer (acute and chronic) risks associated with the TACs on nearby individual receptors (including residences and workers). In order to accurately model the magnitude of TAC exposure on individual receptors, the following information is required:

- Type of TACs emitted during construction and operational activities (e.g. diesel particulate matter, benzene, acrolein, aniline, etc.) (note: there are 187 hazardous air pollutants currently regulated by the EPA that are considered TACs);
- TACs source location(s) and configuration (note: this is typically provided by the project applicant for the operational phase via a site plan and detail on the specific project type, and for the construction phase via construction plans);
- TAC emissions rate(s);
- TAC release height(s); and
- The precise location of nearby residential and workplace receptors.

This information is incorporated into dispersion modeling software (such as AERMOD), which is used in conjunction with facility health risk assessment software (such as the Hotspots Analysis and Reporting Program, otherwise known as HARP-2). The results of such analysis provide a numerical estimate of maximum health risks, which are incorporated into the HRA (with detailed methodology and a list of assumptions provided). However, since the General Plan Update is a long-range planning document and therefore does not provide sufficient detail on specific development projects that would potentially occur as part of implementation of the General Plan Update (such as providing detailed information on the type, location, and sizing of potential sources of TACs such as warehouses, gasoline/diesel refueling stations, light industrial facilities, etc.), there is insufficient information available at this level of analysis to conduct a reasonable or scientifically valid analysis of TACs. Specific development projects in Lawndale that have the potential to generate potentially significant risks associated with the release of TACs are required to undergo an analysis of their potential health risks associated with TACs, based upon the specific details of each individual project.

Overall, because there are no specific development projects identified or approved under the General Plan Update, the location of the development projects, and the exact nature of the development are unknown, determining health risk as this time is speculative. Therefore, the analysis of TAC health risk is discussed qualitatively in this analysis.

5.3.5 IMPACTS AND MITIGATION MEASURES

AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: The following analysis addresses the General Plan Update's consistency with applicable plans and policies that govern air quality. In particular, the analysis addresses consistency with the SCAQMD's AQMP, which is an air quality plan that includes strategies for achieving attainment of applicable ozone, PM_{10}, and $PM_{2.5}$ standards.

As discussed above, SCAQMD has adopted a series of AQMPs to lead the Air Basin into compliance with several criteria air pollutant standards and other Federal requirements, while taking into account construction and operational emissions associated with population and economic growth projections provided by SCAG's 2020 RTP/SCS. SCAQMD recommends that, when determining whether a project is consistent with the relevant AQMPs, the lead agency should assess whether the project would directly obstruct implementation of the plans by impeding SCAQMD's efforts to achieve attainment with respect to any criteria air pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM_{10}, and $PM_{2.5}$) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential units) upon which the plan is based. SCAQMD guidance indicates that projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and would not interfere with its attainment.

SCAQMD thresholds for construction and operational emissions are designed for the analysis of individual projects and not for long-term planning documents, such as the General Plan Update, which would be implemented over a 20-year period. Emissions are dependent on the exact size, nature, and location of an individual land use type, combined with reductions in localized impacts from the removal of existing land use types, as applicable (i.e. conversion of light industrial uses). Emissions associated with the operation of individual projects, could exceed project-specific thresholds established by SCAQMD.

CEQA requires that general plans be evaluated for consistency with the AQMP. Because the AQMP strategy is based on projections from local general plans, only new or amended general plan elements, specific plans, or individual projects under the general plan need to undergo a consistency review. Projects considered consistent with the local general plan are consistent with the air quality-related regional plan. Indicators of consistency include:

- Control Strategies: Whether implementation of a project would increase the frequency or severity of existing air quality violations; would cause or contribute to new violations; or would delay the timely attainment of AAQS or interim emissions reductions within the AQMP.
- Growth Projections: Whether implementation of the project would exceed growth assumptions within the AQMP, which in part, bases its strategy on growth forecasts from local general plans.

CONSTRUCTION

Control Strategies

The Air Basin is designated nonattainment for ozone and $PM_{2.5}$ under the CAAQS and NAAQS, and nonattainment for PM_{10} under the CAAQS. Future development accommodated by the General Plan Update involves long-term growth associated with buildout of the City of Lawndale. Therefore, the emissions of criteria pollutants associated with future developments under the General Plan Update could exceed the SCAQMD thresholds for criteria pollutants. Future development of individual projects under the General Plan Update would be required to comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the ATCM to limit heavy-duty diesel motor vehicle idling to no more than five minutes at any given time, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural

coatings. Furthermore, as applicable to the type of growth, individual projects under the proposed General Plan Update would comply with fleet rules to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 (CARB Truck and Bus regulation)). Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Therefore, the construction anticipated by the proposed would be consistent with the AQMP under the first indicator.

Growth Projections

Implementation of the General Plan Update would result in an increase in short-term employment compared to existing conditions. Future development accommodated by the General Plan Update would involve construction, but implementation of the General Plan Update would not necessarily create new construction jobs, since construction-related jobs generated by future development would likely be filled by employees within the construction industry within the City of Lawndale and the greater Los Angeles County region. Construction industry jobs generally have no regular place of business, as construction workers commute to job sites throughout a given region, which may change several times a year. Moreover, these jobs would be temporary in nature. Therefore, the construction jobs generated by future development accommodated by the General Plan Update would not conflict with the long-term employment or population projections upon which the AQMPs are based.

OPERATION

Control Strategies

Future development under the General Plan Update would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and, to the extent applicable, the 2020 RTP/SCS.

As discussed above, the 2022 AQMP includes land use and transportation strategies from the 2020 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. The applicable land use strategies include: planning for growth around livable corridors; providing more options for short trips/neighborhood mobility areas; supporting zero emission vehicles and expanding vehicle charging stations; and supporting local sustainability planning. The applicable transportation strategies include: managing through the Transportation Demand Management (TDM) Program and the Transportation System Management (TSM) Plan including advanced ramp metering, and expansion and integration of the traffic synchronization network; promoting active transportation. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

The location, design, and land uses of the growth anticipated by the General Plan Update would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing commercial and residential density near public transit. The land uses allowed under the proposed General Plan (Figure 3-4 in Section 3.0) provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area. The availability of public transportation and the focus on increasing density relative to the existing public transportation, enables implementation of the General Plan Update to potentially reduce vehicle trips, VMT, and

associated transportation-related emissions per capita, compared to the existing conditions. Therefore, the General Plan Update would result in a less than significant impact associated with air quality. The proposed Project would be consistent with the AQMP under the first indicator.

Growth Projections

The emissions inventory for SCAB is formed, in part, by existing city and county general plans. The AQMP is based on population, employment and VMT forecasts by SCAG. A project might be in conflict with the AQMP if the development is greater than that anticipated in the local general plan and SCAG's growth projections. Future development in the City of Lawndale that is consistent with the General Plan Update could increase vehicle trips and VMT that would result in emissions of ozone precursors and particulate matter. Individual projects under the General Plan Update would be required to undergo subsequent environmental review pursuant to CEQA, and would be required to demonstrate compliance with the AQMP. Individual projects would also be required to demonstrate compliance with SCAQMD rules and regulations governing air quality.

The City of Lawndale continues to coordinate with SCAQMD and SCAG to ensure Citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Additionally, the General Plan Update includes goals, policies and actions to further minimize potential impacts to air quality in support of the AQMP. The proposed Resource Management Element includes Goal RM-4 of the General Plan Update Resources Management Element addresses potential air quality impacts by improving air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions. Also, Policy LU-1.1 of the General Plan Update Land Use Element promotes a land use pattern that would reduce pollution and air quality impacts. Therefore, the operation of the proposed General Plan Update would not conflict with or obstruct the implementation of the applicable air quality plan and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2 **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.4: **Commercial Corridors.** Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

Policy LU-1.6: **Uses to Meet Daily Needs.** Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

MOBILITY ELEMENT

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: **Multimodal Connectivity.** Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Action M-3a When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.3: **Transit Facilities.** Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Action M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Policy M-6.1: **Bicycle Master Plan.** Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: **Local Travel Network.** Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.3: **Hawthorne Boulevard Sidewalks.** Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

Policy M-6.4: **Sidewalk and Bikeway Gaps.** Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: **Bicycle/Pedestrian Facilities at New Developments.** Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: **Effects of New Technologies on Active Transportation.** Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.2: **Transportation Demand Management.** Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Action M-9b Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: **Air Quality and Greenhouse Gas Emissions.** Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: **Regional Cooperation**. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: **Measurement and Enforcement**. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: **GHG Emissions.** Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: **Transportation Options**. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability**. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: **Sensitive Receptors.** Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: **Mitigation.** Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: **GHG Reduction.** Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: **Mitigation. Public Engagement**. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet EPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NO_X emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low

VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: **Energy Resources.** A community that safely manages its energy resources.

Policy RM-5.1: **Compliance with State Legislation.** Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: **Green Building Standards Code.** Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: **Renewable Energy.** Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: **Energy-Efficient Materials.** Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: **Energy Conservation.** Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: **Energy Needs.** Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: **Business Community.** Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: **Public Education.** Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: **Promote Energy Conservation in Existing Building Stock.** Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

AQ-2: Would the project result in cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under the applicable federal or state ambient air quality standard?

Impact Analysis: Ozone, NO_2, VOC and PM_{10} and $PM_{2.5}$ are pollutants of concern, as SCAB has been designated as a nonattainment area for State ozone, PM_{10} and $PM_{2.5}$ and as a Federal nonattainment area for ozone and PM_{10}. SCAB is currently in attainment and/or unclassified for State and Federal CO, SO_x, NO_2, lead and Federal attainment for PM_{10}. SCAQMD has established numerical significance thresholds for regional emissions during construction and operation. The numerical significance thresholds are based on the recognition that the Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health. The General Plan Update would potentially cause or contribute to an exceedance of an ambient air quality standard if the following would occur:

Regional construction emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed daily emissions thresholds:

- 75 pounds a day for VOC;
- 100 pounds per day for NO_X;
- 150 pounds per day for PM_{10}; and
- 55 pounds per day for $PM_{2.5}$.

Regional operational emissions exceed any of the following SCAQMD prescribed daily emissions thresholds:

- 55 pounds a day for VOC;
- 55 pounds per day for NO_X;
- 150 pounds per day for PM_{10}; and
- 55 pounds per day for $PM_{2.5}$.

CONSTRUCTION

Construction of the growth anticipated by the proposed General Plan Update has the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, and through vehicle trips generated by workers and haul trucks. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_x and PM emissions (i.e., PM_{10} and $PM_{2.5}$), would result from the use of diesel-powered on- and off-road vehicles and equipment. Construction emissions can vary substantially from day-to-day, depending on the level of activity and the specific type of construction activity.

Information regarding the specific development projects and location of receptors for those projects is required in order to model specific emissions throughout the buildout horizon. Construction activities are anticipated to occur at various levels throughout the 20-year buildout horizon (2025 to 2045). Since specific projects are unknown at this time, as is the level of intensity of construction over the 20 years,

the analysis provides emissions from an anticipated reasonable worst-case construction scenario. Specifically, emissions were modeled for all development within the Planning Area in buildout year 2045.[3,4]

As detailed in the methodology section above, daily emissions were estimated for the construction of the land uses provided in Table 3-4 of Section 3.0, *Project Description*. Detailed information on modeling parameter inputs is provided in Appendix B of this EIR. The results of the criteria air pollutant calculations are presented in Table 5.3-6, *Maximum Regional Construction Emissions*. The calculations used to develop construction emissions incorporate compliance with applicable dust control measures required to be implemented during each phase of construction by SCAQMD Rule 403 (Control of Fugitive Dust), and fugitive VOC control measures required to be implemented by architectural coating emission factors based on SCAQMD Rule 1113 (Architectural Coatings).

As shown in Table 5.3-6, construction-related daily emissions would exceed the SCAQMD significance thresholds for VOCs, NO_X, CO, PM_{10}, and $PM_{2.5}$. Therefore, short-term regional construction emissions would be potentially significant.

Table 5.3-6
Maximum Regional Construction Emissions

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	124.5	351.0	1,086.7	1.0	196.1	52.4
SCAQMD Threshold	75	100	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	No
Source: CalEEMod v.2022.1; Kittelson & Associates, 2023.						

OPERATION

Operation of future development accommodated by the General Plan Update would generate criteria air pollutant emissions from Project-generated vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. The on-road mobile sources related to the operation of future development accommodated by the General Plan Update include passenger vehicles, onsite use of off-road equipment and delivery trucks. VMT data, takes into account ridership, mode, and distance on freeways and local streets as provided in Section 5.17, *Transportation*. Projected emissions resulting from operational activities of future

[3] Note that this approach provides an overestimate of the emissions generated by the proposed Project within the Planning Area (since it models total development that is projected to exist within the Planning Area in 2045, including development that currently exists and would continue to exist in 2045). This approach to estimate proposed project emissions provides a proxy for the 'worst-case scenario' for the purposes of CEQA analysis.

[4] Note that traffic data provided by the traffic consultant (Kittelson & Associates) was unavailable for year 2045. Therefore, traffic data for year 2040 was used as a proxy for year 2045.

development accommodated by the General Plan Update are presented in Table 5.3-7, *Maximum Regional Operational Emissions (pounds/day)*.

Table 5.3-7
Maximum Regional Operational Emissions (pounds/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	1,465.7	441.1	3,956.6	8.2	751.4	208.2
SCAQMD Threshold	55	55	550	150	150	55
Above Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Source: CalEEMod v.2022.1; Kittelson & Associates, 2023.						

As identified in Table 5.3-7, operational emissions for future development accommodated by the General Plan Update would exceed regulatory thresholds for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$. While these thresholds are the only thresholds available for numerically determining significance, it should be noted that these thresholds were specifically developed for use in determining significance for individual projects and not for program-level documents, such as the General Plan Update. However, as emissions for VOC, NO_X, CO, PM_{10}, and $PM_{2.5}$ exceed regulatory thresholds, the regional operational emissions would be potentially significant.

CONCLUSION

The exact level of construction emissions from the development anticipated by future development accommodated by the General Plan Update cannot be quantified without full detail of the development projects to be implemented and the extent to which mitigation can be applied. Individual projects anticipated by the General Plan Update would be required to implement their own environmental review. The proposed policies and actions of the General Plan Update would potentially reduce emissions, which could potentially address impacts related to exceeding air quality regulatory thresholds. These policies and actions are oriented toward the reduction of the air quality impacts of individual projects. Action RM-4k requires that future development projects implemented under the General Plan Update would be required to demonstrate consistency with SCAQMD construction threshold emissions.

With respect to operational emissions, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the General Plan Update's policies and actions. Policy RM-4.2 of the General Plan Update Resources Management Element requires the City to coordinate with CARB and SCAQMD to enforce the standards of the Clean Air Act. Policy RM-4.6 encourages and incentivizes higher density and mixed-use development opportunities to lessen the impacts of traffic congestion on local air quality. Policy RM-4.8 requires the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts. Action RM-5c provides for the continue review of development projects to ensure that all new public and private development complies with Title 24 energy standards, as well as the energy efficiency standards established by the General Plan Update and the

Municipal Code. However, as there is no way to determine the effectiveness of such regulations, policies, and actions for individual projects, it is impossible to determine if potential impacts would be reduced to below regulatory thresholds.

As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. While implementation of these policies and actions would reduce criteria pollutant emissions resulting from implementation of the General Plan Update, the extent to which the impacts are reduced would need to be determined on a project-by-project basis, as necessary. Therefore, this impact is significant and unavoidable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan Update goals, policies and actions cited above in AQ-1.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant and Unavoidable Impact.

AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: Criteria air pollutant emissions have the potential to result in health impacts on sensitive receptors located near new development within the Planning Area. As discussed previously, localized impacts are associated with onsite activities. In addition to these localized impacts, vehicle travel associated with future development accommodated by the General Plan Update has the potential to result in exposure of sensitive receptors to CO emissions from intersection congestion. Based on the nature and extent of new development, nearby sensitive receptors could be exposed to levels of toxic air contaminants that could result in a potential increase in cancer, acute, and/or chronic risk. The proposed Project would potentially cause a significant impact if one of the following would occur:

Localized emissions from NO_2 and CO for future development accommodated by the General Plan Update, when combined with existing ambient concentrations, would exceed the CAAQS.

Localized emissions from PM_{10} and $PM_{2.5}$ would result in exceedance of the following incremental increase thresholds:

- 10.4 µg/m^3 (24-hour) and 1 µg/m^3 of PM_{10} (Annual) for construction;
- 10.4 µg/m^3 (24-hour) of $PM_{2.5}$ for construction;
- 2.5 µg/m^3 (24-hour) and 1.0 µg/m^3 (Annual) of PM_{10} for operations; and
- 2.5 µg/m^3 (24-hour) of $PM_{2.5}$ for operation.

Buildout of the General Plan Update would emit carcinogenic materials or TACs that exceed the maximum incremental cancer risk of ten in one million or an acute or chronic hazard index of 1.0; or if cancer burden corresponds to an increase in more than 0.5 excess cancer cases in areas where the Project-related increase in individual cancer risk exceeds 1 in one million.

LOCAL AIR QUALITY

SCAQMD recommends the evaluation of localized air quality impacts on sensitive receptors in the immediate vicinity of project-specific level proposed projects (following the SCAQMD Localized Significant Threshold, or LST, methodology). However, the SCAQMD explicitly advises that the LST methodology is not applicable to regional projects such as general plans. Therefore, an analysis of localized emissions during construction activities is not provided herein. Because the exact nature, location, and operation of the future developments are unknown, quantification of potential localized operational risk would be speculative. However, as construction and operation of these future developments would occur within close proximity to sensitive receptors, there is the potential for localized emissions to exceed regulatory levels. Therefore, localized construction and operational emissions with respect to the proposed Project would be potentially significant.

INTERSECTION HOT SPOT ANALYSIS

The potential for future development accommodated by the General Plan Update to cause or contribute to CO hotspots is evaluated by comparing Planning Area intersections (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the implementation of the General Plan Update would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at project impacted intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

CO levels in the Planning Area are substantially below the Federal and State standards. CO levels decreased dramatically in the Air Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Air Basin for some time and the Air Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not expected that CO levels within the Planning Area at project-impacted intersections would rise to the level of an exceedance of these standards.

Additionally, SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. Based on the intersection volumes identified in the 2003 AQMP, if a project's traffic levels exceed 100,000 vehicles per day at any proposed project-impacted intersection, there would be the potential for significant impacts and dispersion modeling would need to be conducted to determine project level impacts.

Based on the *Lawndale General Plan CEQA Transportation Analysis* prepared by Kittelson & Associates, Inc., dated July 12, 2023 (Appendix F), there are no intersections that would exceed 100,000 vehicles per day within the Planning Area. As a result, CO concentrations are expected to be less than those estimated in the 2003 AQMP, which would not exceed the applicable thresholds. Thus, this comparison demonstrates that implementation of the General Plan Update would not contribute considerably to the formation of CO hotspots and no further CO analysis is required. The proposed Project would result in less than significant impacts with respect to CO hotspots.

TOXIC AIR CONTAMINANTS

Construction and operation of the future development accommodated by the General Plan Update would result in emissions of TACs, predominantly from diesel particulate emissions from on- and off-road vehicles during construction and from the operation of diesel fueled equipment or generators during operational activities. Because the exact nature, location, and operation of the future developments are unknown, and because health risk impacts from TACs are cumulative over the life of the nearby receptors, quantification of potential health risks would be speculative. However, as construction and operation of these future developments would occur within close proximity to sensitive receptors, there is the potential for risk to exceed regulatory levels. Therefore, health risks with respect to the development anticipated by the General Plan Update would be potentially significant.

HEALTH IMPACTS

Because regional emissions exceed the SCAQMD regulatory thresholds during construction and operational activities, there is the potential that these emissions would exceed the CAAQS and NAAQS thus, resulting in a health impact. Without knowing the exact specifications for all projects that may be developed under the General Plan Update, there is no way to accurately calculate the potential for health impacts from the overall General Plan Update. Individual projects would be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. Because there is no way to determine the potential for these projects to affect health of sensitive receptors within the City of Lawndale, the proposed Project would result in potentially significant health impacts.

The proposed policies of the General Plan Update would potentially reduce emissions, which could potentially reduce impacts related to exceeding regulatory thresholds of criteria air pollutant emissions. Goal RM-4 of the General Plan Update Resources Management Element addresses potential air quality impacts by improving air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions. Specifically, Policy RM-4.7 addresses potential air quality impacts to sensitive receptors. Policy LU-1.1 of the General Plan Update Land Use Element promotes a land use pattern that would reduce pollution and air quality impacts.

CONCLUSION

With respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the General Plan Update policies and actions listed above would mitigate and reduce such emissions. However, the exact location, type, nature, and size of future projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time, as the details of potential future projects are not currently known. As such, there is no way to determine the extent to which these regulations will be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the

policies and actions listed above. Therefore, localized operational impacts, construction and operational health, and toxic air impacts would remain significant and unavoidable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan Update goals, policies and actions cited above in AQ-1.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant and Unavoidable Impact.

AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD's *CEQA Air Quality Handbook*, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. Future development accommodated by the General Plan Update would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. Construction of future development would not be expected to generate nuisance odors at nearby air quality sensitive receptors. Therefore, impacts with respect to odors would be less than significant.

According to the SCAQMD's *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Potential operational airborne odors could be created by commercial and industrial uses developed under the General Plan Update. However, compliance with the City's Municipal Code, including Section 6.24.040 which prohibits animal premises from being a source of offensive odors, and SCAQMD's Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds would reduce potential impacts. The other potential source of odors would be new waste receptacles within the Planning Area. The receptacles would be stored in areas and in containers, as required by City Municipal Code Chapter 8.32, *Garbage Collection and Disposal*, and be emptied on a regular basis, before potentially substantial odors have developed.

Additionally, the policies included as part of the General Plan Update (described above) would reduce mobile and stationary source emissions and odors associated with diesel fuel by focusing on land use patterns that improve air quality, reduce air pollution from stationary sources, and encourage/enable increased transit behavior. Consequently, implementation of the General Plan Update would not create operational-related objectionable odors affecting a substantial number of people within the City. Impacts would be less than significant in this regard.

Proposed General Plan Update Goals, Policies, and Actions: The General Plan Update does not include goals, policies, or actions specific to odors.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for air quality considers development with the City as well as SCAB.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis: As stated under Impact AQ-1, the City of Lawndale continues to coordinate with SCAQMD and SCAG to ensure Citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Additionally, the General Plan Update includes policies and actions to further minimize potential impacts to air quality in support of the AQMP. Therefore, the operation of the proposed General Plan Update would not conflict with or obstruct the implementation of the applicable air quality plan and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or state ambient air quality standard?

Impact Analysis: Construction of the growth anticipated by the General Plan Update has the potential to temporarily emit criteria air pollutant emissions through the use of heavy-duty construction equipment, and through vehicle trips generated by workers and haul trucks. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_X and PM emissions (i.e., PM_{10} and $PM_{2.5}$), would result from the use of diesel-powered on- and off-road vehicles and equipment. Construction emissions can vary substantially from day-to-day, depending on the level of activity and the specific type of construction activity. As shown in Table 5.3-6, construction-related daily emissions would exceed the SCAQMD significance thresholds for VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$.

Operation of the future development accommodated by the General Plan Update would generate criteria air pollutant emissions from project-generated vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. As identified in Table 5.3-7, potential operational emissions for the proposed Project would also

exceed regulatory thresholds (for VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$). Feasible mitigation measures are incorporated into the policies and actions included within the General Plan Update. However, there are no feasible criteria air pollutant reduction measures beyond those identified within the policies and actions identified that would reduce impacts. While implementation of these policies and actions would reduce criteria pollutant emissions, the extent to which impacts would be generated by future development and infrastructure projects have to be determined on a project-by-project basis, as necessary.

Moreover, with respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the policies and actions listed above would mitigate and reduce such emissions. However, as there is no way to determine the extent to which these regulations would be, or need to be, implemented, it is impossible to determine if potential impacts would be reduced to below regulatory thresholds because the details and potential emissions levels of future development projects is not known at this time, as there are no specific development projects proposed as part of the General Plan Update. Additionally, there are no known feasible mitigation measures beyond the policies and actions listed above. Therefore, localized operational impacts, construction and operational health, and toxic air impacts would remain significant and unavoidable.

Lastly, with respect to other emissions, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. However, as there is no way to determine the extent to which these regulations would be, or need to be, implemented, it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. As project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. Based on these impacts, the General Plan Update would contribute to a cumulative impact with regard to air quality in the region and within the air basin (i.e. the South Coast Air Basin) as a whole. Therefore, this impact is considered a cumulatively considerable and significant and unavoidable impact.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant and Unavoidable Impact.

Would the project, combined with other related cumulative projects, expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis: As stated under Impact AQ-3, with respect to local air quality emissions, toxic air contaminant emissions, and health impacts, future development under the General Plan Update would be required to comply with AQMP, SIP, CARB, SCAQMD regulations, Title 24 energy efficiency standards, and the proposed General Plan Update policies and actions. Implementation of the General Plan Update

policies and actions listed above would mitigate and reduce such emissions. However, the exact location, type, nature, and size of future projects that may expose sensitive receptors to pollutant concentrations cannot be calculated at this time, as the details of potential future projects are not currently known. As such, there is no way to determine the extent to which these regulations will be, or need to be, implemented, and it is impossible to determine if potential impacts would be reduced to below regulatory thresholds. Additionally, as project-specific information is not currently known, there are no known feasible mitigation measures that can be identified at this time beyond the policies and actions listed above. Therefore, this impact is considered a cumulatively considerable and significant and unavoidable impact.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant and Unavoidable Impact.

Would the project, combined with other related cumulative projects, result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis: As stated under Impact AQ-4, with respect to potential sources that may emit odors during construction and operations, future developments under the General Plan Update would be required to comply with the CARB requirements, SCAQMD rules, the City's Municipal Code, and the proposed General Plan Update policies and actions. As a result, the implementation of the General Plan Update would not result in a cumulatively considerable contribution to cumulative odor impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project implementation would not contribute to a cumulatively considerable objectionable odors affecting a substantial number of people within the City; impacts would be less than significant in this regard.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.7 SIGNIFICANT UNAVOIDABLE IMPACTS

The General Plan Update would result in a significant unavoidable impact for the following areas:

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.

- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

All other air quality impacts associated with implementation of the General Plan Update would be less than significant.

If the City of Lawndale approves the General Plan Update, the City will be required to make findings in accordance with CEQA Guidelines Section 15091 and prepare a Statement of Overriding Considerations for consideration by the City's decision makers in accordance with CEQA Guidelines Section 15093.

5.3.8 REFERENCES

Ahrens, Donald C., Meteorology Today: An Introduction to Weather, Climate, & the Environment, 2006.

California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000, https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf

California Air Resources Board, *National Ambient Air Quality Standards*, 2023a, https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards

California Air Resources Board, *Maps of State and Federal Area Designations*, 2023b, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations

South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993, https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#

South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003, Revised July 2008. https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

South Coast Air Quality Management District, *Localized Significance Thresholds Methodology – Appendix C*, Revised October 21, 2009.

South Coast Air Quality Management District (SCAQMD), *2022 Air Quality Management Plan (AQMP)*, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16, accessed May 1, 2023.

Southern California Association of Governments (SCAG), *Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, Adopted Final Connect SoCal, https://scag.ca.gov/read-plan-adopted-final-plan, accessed May 1, 2023.

Western Regional Climate Center, *Period of Record Monthly Climate Summary*, https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5114, accessed on May 1, 2023.

5.4 BIOLOGICAL RESOURCES

5.4.1 PURPOSE

This section describes biological resources within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

KEY TERMS

The following key terms are used throughout this section to describe biological resources and the framework that regulates them:

Hydric Soils: One of the three wetland identification parameters, according to the Federal definition of a wetland, hydric soils have characteristics that indicate they were developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season. There are approximately 2,000 named soils in the United States that may occur in wetlands.

Sensitive Natural Community: A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The California Department of Fish and Wildlife (CDFW) tracks sensitive natural communities in the California Natural Diversity Database (CNDDB).

Special-Status Species: Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this report, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term “special status” includes those species that are:

- Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
- State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
- Species listed by the USFWS or the CDFW as a species of concern (USFWS), rare (CDFW), or of special concern (CDFW);
- Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);

- Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
- Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Waters of the U.S.: The Federal government defines waters of the U.S. as "lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows" [33 C.F.R. §328.3(a)]. Waters of the U.S. exhibit a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the U.S. Army Corps of Engineers (USACE) as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" [33 C.F.R. §328.3(e)].

5.4.2 ENVIRONMENTAL SETTING

BIOREGIONS

Lawndale is located within the Southern California Coast bioregion. This bioregion is bounded on the north by the southern edge of the Los Padres National Forest and the northern base of the San Gabriel and San Bernardino Mountains. This bioregion is bounded on the east by the western edge of the Bureau of Land Management California Desert Conservation Area, and is bordered on the south by the Mexican border. Landscapes in this bioregion range from flatlands to mountains, and ecosystems range from ocean to desert. The region also contains two of California's largest cities (Los Angeles and San Diego). More than any other bioregion in the State, urbanization has caused intense effects of natural resources (SWRCB 2012). Urbanization in the Southern California Coast bioregion has resulted in the loss of habitat, spread of nonnative species, and the loss of native species.

CALIFORNIA WILDLIFE HABITAT RELATIONSHIP SYSTEM

The California Wildlife Habitat Relationship (CWHR) habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly-occurring birds, mammals, reptiles, and amphibians. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System, including: 27 tree, 12 shrub, six herbaceous, four aquatic, eight agricultural, one developed, and one non-vegetated (CDFW 2023).

According to the CWHR System, there is only one cover type (wildlife habitat classification) in the Planning Area out of 59 found in the State; refer to Figure 5.4-1, *Land Cover Types*. This cover type is Urban. However, there are three additional cover types found within the surrounding region. These include: Annual Grassland, Lacustrine, and Pasture.

A brief description of the four cover types are as follows:

Developed Cover Types

Urban habitats are not limited to any particular physical setting. Three urban categories relevant to wildlife are distinguished: downtown, urban residential, and suburbia. The heavily-developed downtown is usually at the center, followed by concentric zones of urban residential and suburbs. There is a progression outward of decreasing development and increasing vegetative cover. Species richness and diversity is extremely low in the inner cover. The structure of urban vegetation varies, with five types of vegetative structure defined: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. As stated, the entire Planning Area (approximately 1,555 acres) is identified as urban habitat.

Herbaceous Dominated Cover Types

Annual Grassland habitat occurs mostly on flat plains to gently rolling foothills. Climatic conditions are typically Mediterranean, with cool, wet winters and dry, hot summers. The length of the frost-free season averages 250 to 300 days. Annual precipitation is highest in northern California. Annual grassland habitat is not found within the Planning Area, but is found within the surrounding region (e.g., in open space areas of Alondra Park and utility easement).

Pasture vegetation is a mix of perennial grasses and legumes that normally provide 100 percent canopy closure. Heights of vegetation varies, according to season and livestock stocking levels, from a few inches to two or more feet on fertile soils before grazing. Pasture habitat is not found within the Planning Area, but is found within the surrounding region (e.g., in small patches of undeveloped residential areas).

Aquatic Cover Types

Lacustrine habitats are inland depressions or dammed riverine channels containing standing water. These habitats may occur in association with any terrestrial habitats, Riverine, or Fresh Emergent Wetlands. They may vary from small ponds less than one acre to large areas covering several square miles. Depth can vary from a few inches to hundreds of feet. Typical lacustrine habitats include permanently flooded lakes and reservoirs, and intermittent lakes and ponds (including vernal pools) so shallow that rooted plants can grow over the bottom. Most permanent lacustrine systems support fish life; intermittent types usually do not. Lacustrine habitat is not found within the Planning Area, but is found within the surrounding region (e.g., the artificial pond in Alondra Park).

SPECIAL-STATUS SPECIES

As previously described, special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by Federal, State, or other agencies. The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB), the California Native Plant Survey (CNPS) Inventory of Rare and Endangered Plants, and the USFWS endangered and threatened species lists. The background search was regional in scope and focused on documented occurrences within a nine-quad (which includes the following U.S. Geological Survey quadrangles: Beverly Hills, Hollywood, Los Angeles, Venice, Inglewood, South Gate, Redondo Beach, Torrance, and Long Beach), and a one-mile search area; refer to Appendix C, *Biological Resources*.

Special-Status Plants

The search revealed documented occurrences of over 100 special-status plant species within the nine-quad search area. Of these special-status plant species, four species are located within one mile of the Planning Area; refer to Appendix C.

Table 5.4-1, *Special-Status Plants Present or Potentially Present*, provides a list of special-status plant species that are documented within a one-mile search area of the Planning Area, and their current protective status. Figure 5.4-2, *California Natural Diversity Database: One-Mile Search*, illustrates the special-status plant species located within one mile of the Planning Area.

Table 5.4-1
Special-Status Plants Present or Potentially Present

Scientific Name	Common Name	Federal Status	State Status	CRPR*
Orcuttia Californica	California Orcutt Grass	Endangered	Endangered	1B.1
Navarretia Prostrata	Prostrate Vernal Pool Navarretia	None	None	1B.2
Eryngium Aristulatum Var. Parishii	San Diego Button- Celery	Endangered	Endangered	1B.1
Atriplex Coulteri	Coulter's Saltbush	None	None	1B.2

Source: California Department of Fish & Wildlife, CNDDB, 2022.
Notes: Nine-quad search area of Lawndale.
*California Rare Plant Rank (CRPR) Key:
1B.1 Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California.
1B.2 Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California.

Special-Status Animals

The search revealed documented occurrences of nine special-status animal species within one-mile of the Planning Area; refer to Appendix C. This includes: one bird, four insects, one amphibian, two reptiles, and one mammal. Table 5.4-2, *Special-Status Animals Present or Potentially Present*, provides a list of the special-status animal species that are documented within one mile of the Planning Area, and their current protective status. Figure 5.4-2 illustrates the special-status animal species located within one mile of the Planning Area.

Table 5.4-2
Special-Status Animals Present or Potentially Present

Scientific Name	Common Name	Federal Status	State Status	CDFW Status*
Amphibians				
Spea hammondii	Western spadefoot	None	None	SSC
Birds				
Agelaius tricolor	Tricolored blackbird	None	Threatened	SSC
Insects				
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	Endangered	None	--
Rhaphiomidas terminatus terminatus	El Segundo flower-loving fly	None	None	--
Bombus crotchii	Crotch bumble bee	None	None	--
Danaus plexippus pop. 1	Monarch- California overwintering population	Candidate Threatened	None	--
Reptiles				
Anniella stebbinsi	Southern California legless lizard	None	None	SSC
Phrynosoma blainvillii	Coast horned lizard	None	None	SSC
Mammal				
Eumops perotis californicus	Western mastiff bat	None	None	SSC

Source: California Department of Fish & Wildlife, CNDDB, 2022.
Notes: Nine-quad search area of Lawndale.
*CDFW Status Key:
SSC CDFW Species of Special Concern

Sensitive Natural Communities

The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search found that there are no sensitive natural communities within the nine-quad search area. The Planning Area is largely built-out and consists of a mixture of impervious surfaces and native and non-native species, typical of urban habitats.

Aquatic Resources

There are no large water bodies or creeks within the Planning Area. A portion of the Dominguez Channel, a 15.7-mile-long channelized watercourse, flows through the eastern portion of the Planning Area; refer to Section 5.10, *Hydrology and Water Quality*.

Vernal pools are a temporary wetland that occur as a result of rainwater failing to drain into subsoils and can provide habitat for several sensitive plant and animal species. In California, vernal pools fill in the winter and spring, as water collects in depressions. The water eventually evaporates, leaving a dry depression in the summer and fall. Vernal pools support a range of unique plant and animal species. On some occasions, vernal pools can be connected by small drainages. These connected vernal pools are known as vernal complexes. No known vernal pools that have been identified within Lawndale.

5.4.3 REGULATORY SETTING

FEDERAL

Federal Endangered Species Act

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (FESA) of 1973. FESA Section 9 prohibits "take" of threatened or endangered species. "Take" under the FESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any Federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

"Harm" has been defined by the regulations of the USFWS to include types of "significant habitat modification or degradation." The U.S. Supreme Court, in *Babbit v. Sweet Home*, 515 U.S. 687, ruled that "harm" may include habitat modification "...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." Activities that may result in "take" of individuals are regulated by USFWS.

Under the FESA, "Critical Habitat" is also designated at the time of listing or within one year of listing. "Critical Habitat" refers to habitat or a specific geographic area that contains the elements and features that are essential for the survival and recovery of the species. In the event a project may result in take or in adverse effects to a species' designated Critical Habitat, the project proponent may be required to provide mitigation. If the project has a Federal nexus (i.e., occurs on Federal land, is issued Federal permits, or receives any other Federal oversight or funding), the proponent would be required to enter into Section 7 informal and/or formal consultations with the USFWS to obtain, if possible, a biological opinion allowing for incidental take of the species in question. If the project is on private land or would not require any Federal permits, the proponent would be required to prepare a habitat management plan to address the impacts.

The FESA defines as "endangered" any plant or animal species that is in danger of extinction throughout all or a significant portion of its range. A "threatened" species is a species that is likely to become endangered in the foreseeable future. A "proposed" species is one that has been officially proposed by USFWS for addition to the Federal threatened and endangered species list.

USFWS produced an updated list of candidate species for listing in June 2002 (Federal Register: Volume 67, Number 114, 50 CFR Part 17 2002). Candidate species are regarded by USFWS as candidates for addition to the "List of Endangered and Threatened Wildlife and Plants." Although candidate species are not afforded legal protection under the FESA, they typically receive special attention from Federal and State agencies during the environmental review process.

USFWS also uses the label "species of concern," an informal term that refers to species which might be in need of concentrated conservation actions. As the species of concern designated by USFWS do not receive

formal legal protection, the use of the term does not necessarily ensure that the species would be proposed for listing as a threatened or endangered species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 United States Government Code [USC] 703) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

Bald and Golden Eagle Preservation Act

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (Haliaeetus leucocephalus) and the golden eagle (Aquila chrysaetos) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds (16 U.S. Government Code Section 668(a)). "Take" under the Act includes actions which significantly disturb eagles (50 CFR Section 22.3). 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations, and recent amendments authorize USFWS to issue permits for incidental and practically unavoidable take of eagles.

Section 404 of the Clean Water Act

Clean Water Act (CWA) Section 404 requires that a permit be obtained from the United States Army Corps of Engineers (Corps) prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the United States are broadly defined in the Corps regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (United States Environmental Protection Agency [EPA], 2021). Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, the Court acted to limit the regulatory jurisdiction of the Corps under CWA Section 404 as it applies to adjacent waters (2001). Specifically, the Court ruled that waters that are non-navigable, isolated, and intrastate are not subject to the Corps jurisdiction (Guzy and Anderson 2001). The Corps is required to consult with the USFWS, EPA, and State Regional Water Quality Control Board (RWQCB), among other agencies, in carrying out its discretionary authority under Section 404.

The Corps grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal impact and necessitate a detailed application. The most common type of permit is a nationwide permit. Nationwide permits authorize activities on a nationwide basis unless specifically limited and are designed to regulate with little delay or paperwork certain activities having minimal impacts. Nationwide permits typically take two to

three months to obtain whereas individual permits can take a year or more. To qualify for a nationwide permit, specific criteria must be met. If the criteria restrictions are met, permittees may proceed with certain activities without notifying the Corps. Some nationwide permits require a pre-construction notification before activities can begin.

Section 401 of the Clean Water Act

Applicants for a Federal license or permit for activities which may discharge to waters of the U.S. must seek Water Quality Certification from the State or Indian tribe with jurisdiction. Such Certification is based on a finding that the discharge would meet water quality standards and other applicable requirements. In California, RWQCBs issue or deny Certification for discharges within their geographical jurisdiction. Water Quality Certification must be based on a finding that the proposed discharge would comply with water quality standards, which are defined as numeric and narrative objectives in each RWQCB's Basin Plan. Where applicable, the State Water Resources Control Board (SWRCB) has this responsibility for projects affecting waters within the jurisdiction of multiple RWQCBs. The RWQCB's jurisdiction extends to all waters of the State and to all waters of the U.S., including wetlands.

CWA Section 401 requires that "any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge would comply with the applicable provisions under the Federal Clean Water Act." Therefore, before the Corps would issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

STATE

California Endangered Species Act (California Fish and Game Code Section 2050 et seq.)

State-listed threatened and endangered species are protected under provisions of the California Endangered Species Act (CESA). Activities that may result in "take" of individuals (defined in CESA as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a Species of Special Concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

California Environmental Quality Act

CEQA Guidelines Section 15380 independently defines "endangered" and "rare" species separately from the definitions in the CESA. Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

Lake and Streambed Alteration Program (California Fish and Game Code Sections 1600 through 1616)

California Fish and Game Code Sections 1600 through 1616 establish a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that would do one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that would take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

Native Plant Protection Act (Fish and Game Code Sections 1900 through 1913)

Fish and Game Code Sections 1900 through 1913 were developed to preserve, protect, and enhance Rare and Endangered plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Fish and Game Code Sections 3503, 3503.5, 3511, 3513, 4700, 5050, and 5515

The CDFW administers the Fish and Game Code. There are particular sections of the Fish and Game Code that are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy the nests or eggs of any birds that are protected under the MBTA. Furthermore, any

birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Fish and Game Code Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW would be required prior to the removal of any bird of prey nest that may occur on a project site. Fish and Game Code Sections 3511, 4700, 5050, and 5515 list fully protected bird, mammal, reptile and amphibian, and fish species, respectively. The CDFW is unable to authorize the issuance of permits or licenses to take these species. Examples of species that are State fully protected include golden eagle and white-tailed kite (Elanus leucurus). Fish and Game Code Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

California Native Plant Society Rare or Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under State and Federal endangered species legislation are defined as follows:

- California Rare Plant Rank
  - 1A. Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
  - 1B. Plants Rare, Threatened, or Endangered in California and Elsewhere
  - 2A. Plants Presumed Extirpated in California, But More Common Elsewhere
  - 2B. Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
  - 3. Plants about Which More Information is Needed - A Review List
  - 4. Plants of Limited Distribution - A Watch List
- Threat Ranks
  - 1. Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
  - 2. Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
  - 3. Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

LOCAL

City of Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 12.28, *Street Trees*, outlines the City's tree planting and master street tree plan. Per Section 12.28.030, *Jurisdiction and Control*, the Director has exclusive jurisdiction over the planting, maintenance, and removal of City trees, plants and other vegetation within streets and on other City property. A permit is required for the planting, spraying, pruning, or removal of street trees or trees on public property.

Municipal Code Section 13.16.050, *Subdivision Design*, requires new development to limit clearing and grading of native vegetation to the minimum extent practicable.

5.4.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to biological resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (refer to Impact Statement BIO-1);
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (refer to Impact Statement BIO-2);
- Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (refer to Impact Statement BIO-2);
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (refer to Impact Statement BIO-3);
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statement BIO-4); and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Impact Statement BIO-5).

CEQA Guidelines Section 15065(a), Mandatory Findings of Significance, states that a project may have a significant effect on the environment if it would have "... *the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species* ..."

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional and/or local context. Substantial impacts would be those that would substantially diminish or result in the loss of, an important biological resource or those that would obviously conflict with local, State, or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

CEQA Guidelines Section 15380, *Endangered, Rare or Threatened Species*, states that a lead agency can consider a non-listed species to be Rare, Threatened, or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare, Threatened, or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for

each special-status species was considered according to the definitions for Rare, Threatened, and Endangered listed in CEQA Guidelines Section 15380.

5.4.5 IMPACTS AND MITIGATION MEASURES

BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Impact Analysis: The Planning Area is located within an urbanized area and currently developed with residential and non-residential land uses. The Planning Area consists primarily of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists of primarily ornamental and/or nonnative plant species. Pursuant to the special-status species searches presented in Table 5.4-1 and Table 5.4-2, four special-status plant species and nine special-status animal species have been identified within one mile of the Planning Area and are considered candidate, sensitive, or special status under FESA, CESA and/or CNPS/CRPR designation. A CNDDB search revealed no sensitive natural communities within the nine-quad search area (refer to Appendix C).

The Project proposes a comprehensive update to the City's existing General Plan, including a revised Land Use Map. Implementation of the General Plan Update would result in new development and intensification of existing urban uses primarily along major corridors including Hawthorne Boulevard and Redondo Beach Boulevard. In order to be consistent with the existing use, the Project would redesignate seven acres of land which are existing public-school sites designated as Open Space in the 1992 General Plan to the Public Facilities land use designation. The Open Space land being redesignated consists of existing school facilities with a Joint Powers Agreement with the Lawndale Elementary School District for utilization by the City's residents. The General Plan Update would not modify the Open Space Land Use designation and would continue to provide for public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas. Further, the Project does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. However, subsequent development projects under the proposed General Plan Update could result in direct impacts to certain species found present on an individual project site. For instance, future development within the City could involve the removal of trees, which may have the potential to impact nesting migratory birds. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements for removal. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects.

Compliance with applicable regulations at the time of future development would minimize adverse impacts to sensitive species. Additionally, the General Plan Update includes policies and actions to preserve and protect biological resources within the Planning Area. The proposed Resource Management Element Policy RM-1.1 requires that the City provide for public recreational lands, trails, and open space. Policy RM-1.3 requires new residential development to incorporate on-site open areas or greenspace for

resident use. Policy RM-1.7 directs the City to provide for the use of street trees along sidewalks and property frontages, consistent with the City's Master Street Tree program. Policy RM-1.8 encourages the development of innovative non-traditional public and semi-public open space such as community gardens, parkways, and green space. Action RM-1b directs the City to pursue funding for parkland acquisition, development, and maintenance. Action RM-1c directs the City to prepare and adopt a Master Parks Plan to set policies and standards for City parks and open space. Policy RM-6.3 encourages the City to work with the Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. The proposed Public Safety Element Policy PS-7.3 directs the City to coordinate with Federal, State, and local agencies to establish ecological recovery programs. Adherence to these policies and actions during the discretionary review of future development projects would serve to minimize impacts to sensitive species. Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to sensitive species to a less than significant level.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Goal RM-1: **Parks, Recreation and Open Space.** A community with attractive, safe and accessible parks, recreation, and open space areas.

Policy RM-1.1: **Recreation Types.** Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.3: **Open Space for Private Developments.** Require new private residential development to incorporate on-site open areas, greenspace, or recreational facilities for resident use.

Policy RM-1.7: **Street Trees.** Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

Policy RM-1.8: **Creative Open Space and Parks.** Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general

policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-6.3: **Riparian Habitat.** Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-7.3: **Ecological Recovery.** Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Would the project have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis: The CDFW considers sensitive natural communities to have significant biotic value, with species of plants and animals unique to each community. The CNDDB search revealed no sensitive natural communities within the nine-quad search area. The Planning Area is largely built-out and consists of a mixture of impervious surfaces and native and non-native species, typical of urban habitats.

While not always documented as a sensitive natural community in the CNDDB, streams, rivers, wet meadows, and vernal pools are of high concern because they provide unique aquatic habitat for many endemic species, including special status plants, birds, invertebrates, and amphibians. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the CWA. There are no large water bodies or creeks within the Planning Area and no known vernal pools have been identified. A portion of the Dominguez Channel, a 15.7-mile-long channelized watercourse, flows through the eastern portion of the Planning Area. No other aquatic resources exist within the Planning Area.

The General Plan Update is a planning document that enables additional development consistent with the proposed Land Use Map, but does not include any site-specific development proposals; therefore, adoption of the General Plan Update would not directly impact the environment. However, the Project could have an indirect change on the physical environment through subsequently approved projects that are consistent with the buildout under the General Plan Update. Individual projects within the Planning Area would require a detailed and site-specific review of the site to determine the presence or absence of water features. If water features are present and disturbance is required, Federal and State laws require measures to reduce, avoid, or compensate for impacts to these resources. The requirements of these Federal and State laws are implemented through the permit process. Additionally, the General Plan Update Resource Management Element includes policies and actions intended to protect sensitive natural communities and aquatic resources from adverse effects associated with future development and improvement projects within the Planning Area. The proposed Resource Management Element Policy RM-6.3 directs the City to work with the Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels, such as the Dominguez Channel. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Adherence to these policies and actions during the discretionary review of future development projects would serve to minimize impacts to sensitive species.

Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to aquatic resources to a less than significant level. Thus, the Project would not have a substantial adverse effect on sensitive natural communities, including riparian habitat, or on State or Federally protected wetlands and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.3: **Riparian Habitat.** Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

BIO-3: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Analysis: Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (i.e., linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). Wildlife habitat corridors maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation or removal. The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question.

The City and surrounding area are highly urbanized and generally developed with urban uses. The Planning Area consists of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists of primarily ornamental and/or nonnative plant species. Thus, the Planning Area does not provide for habitat linkages. The portion of the Dominguez Channel that flows through the eastern portion of the Planning Area is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project does not propose site-specific development activities, nor does it involve any changes or modifications to the channel. Thus, the Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The proposed General Plan Resource Management Element includes policies and actions intended to preserve ecological and biological resources. The proposed Resource Management Element Policy RM-1.1 directs the City to provide for public recreational lands, trails, and open space. Policy RM-1.3 requires

new residential development to incorporate on-site open areas or greenspace for resident use. Policy RM-1.7 directs the City to provide for the use of street trees along sidewalks and property frontages, consistent with the City's Master Street Tree program. Policy RM-1.8 encourages the development of innovative non-traditional public and semi-public open space such as community gardens, parkways, and green space. Action RM-1b encourages the City to pursue funding for parkland acquisition, development, and maintenance. Action RM-1c directs the City to prepare and adopt a Master Parks Plan to set policies and standards for City parks and open space. Policy RM-6.3 directs the City to work with Los Angeles County Public Works Department and the Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. The proposed Public Safety Element Policy PS-7.3 directs the City to coordinate with Federal, State, and local agencies to establish ecological recovery programs. Adherence to these policies and actions would serve to protect potential biological resources and provide for trees and other vegetation consistent with wildlife habitat recovery. Thus, through compliance with Federal, State, and local regulations, and General Plan Update goals, policies, and actions, future development under the General Plan Update would have a less than significant impact associated with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Goal RM-1: **Parks, Recreation and Open Space.** A community with attractive, safe and accessible parks, recreation, and open space areas.

Policy RM-1.1: **Recreation Types.** Provide residents a variety of useable public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.3: **Open Space for Private Developments.** Require new private residential development to incorporate on-site open areas, greenspace, or recreational facilities for resident use.

Policy RM-1.7: **Street Trees.** Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

Policy RM-1.8: **Creative Open Space and Parks.** Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-6.3: **Riparian Habitat.** Work with Los Angeles County Public Works and Los Angeles County Flood Control District to preserve and/or restore riparian communities along and within established flood control channels such as the Dominguez Channel, if feasible.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-7.3: **Ecological Recovery.** Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

BIO-4: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis: Future development under the General Plan Update would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources as outlined above. The City does not have a tree preservation policy or ordinance; however, Lawndale

Municipal Code Chapter 12.28, *Street Trees*, addresses the City's tree planting and master street tree plan and requires authorization for the planting, spraying, pruning, or removal of street trees or trees on public property. In addition, the General Plan Resource Management Element includes policies and actions intended to provide for additional trees within the City. For instance, Policy RM-1.7 requires the City to provide for the use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program. Future development projects would be assessed for consistency with the Lawndale Municipal Code and General Plan Update goals, policies, and actions. Thus, the General Plan Update would not conflict with any local policies or ordinances protecting biological resources and impacts would be less than significant tin this regard.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.7: Street Trees. Provide for the consistent use of street trees along all sidewalks and property frontages, consistent with the City's Master Street Tree program.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

BIO-5: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact Analysis: The Planning Area is urbanized and is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Thus, the Project would not conflict with any of these plans and no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions: There are no General Plan Update goals, policies, or actions specific to habitat conservation plans.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.4.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for biological resources would be the Los Angeles region.

Would the project, combined with other related cumulative projects, have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a

candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Would the project, combined with other related cumulative projects, a have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Would the project, combined with other related cumulative projects, have a substantial adverse effect on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impact Analysis: The City is highly urbanized and is not known to support any significant wildlife or native planning communities or species. The Planning Area, along with the surrounding region, are predominately developed or paved and any landscaping consists primarily of ornamental and/or nonnative plant species. Areas having the potential to support significant wildlife or native planning communities or species typically consist of lands designated as open space or for resource protection.

As described above, the potential for the Project to have a substantial adverse effect on any special status species, riparian habitat or sensitive natural community or wetlands is less than significant as these resources do not generally occur within the Planning Area. Future development within the City could involve the removal of trees, which may have the potential to impact nesting migratory birds. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements for removal. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects.

Any future development would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, and adopted regulations pertaining to biological resources, as appropriate. With implementation of the adopted policies and regulations described above, the proposed General Plan Update would not considerably contribute to adverse effects to biological resources, including special status plant or wildlife species, riparian habitat or other sensitive natural community, or any State or Federally protected wetlands. The polices and actions included within the General Plan Update and compliance with existing regulations would reduce the cumulative effect of the General Plan Update on biological resources to a less than significant level. Thus, the proposed Project's incremental effects involving special status plant or wildlife species, riparian habitat or other sensitive natural community, or any State or Federally protected wetlands would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Impact Analysis: The Planning Area, along with the surrounding region, are predominantly developed or paved and any landscaping consists primarily of ornamental and/or non-native plant species and do not provide for habitat linkages. The Dominguez Channel is concrete-lined and considered to have low habitat value. Although the channel could be used for wildlife movement, the Project as well as the cumulative projects do not involve any direct or indirect physical changes or modifications to the channel. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to biological resources. The proposed General Plan Update would not considerably contribute to interference of wildlife movement or impede the use of native wildlife nursery sites. Thus, the proposed Project's incremental effects involving the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Impact Analysis: Site-specific development is not currently proposed as part of the Project; however, future development associated with implementation of the Project would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan Update goals and policies, as appropriate. Proposed removal of any street trees or trees on public property within the City would be reviewed in accordance with Municipal Code Chapter 12.28 and would be required to comply with the requirements for removal. Similarly, cumulative development within the region would be required to comply with any agency-specific policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Future development within the City and cumulative development would be assessed for consistency with the agency-specific Municipal Code and General Plan Update goals, policies, and actions. Since the Project would not conflict with any local policies or

ordinances protecting biological resources, the Project's incremental effects would not be cumulatively considerable in this regard.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Planning Area is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Thus, the Project's incremental effects involving a conflict with any of these plans would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no General Plan Update goals, policies, or actions specific to habitat conservation plans.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.4.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts to biological resources associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to biological resources would occur as a result of the General Plan Update.

5.4.8 REFERENCES

California Department of Fish and Wildlife (CDFW), *Wildlife Habitats - California Wildlife Habitat Relationships System*, https://wildlife.ca.gov/Data/CWHR/Wildlife-Habitats, accessed March 6, 2023.

California Department of Fish & Wildlife (CDFW), California Natural Diversity Database, March 2, 2022.

California State Water Resources Control Board (SWRCB), *Onsite Wastewater Treatment System Policy: Draft Substitute Environmental Document*, March 19, 2012, https://www.waterboards.ca.gov/water_issues/programs/owts/docs/substitute_environdoc.pdf, accessed March 6, 2023.

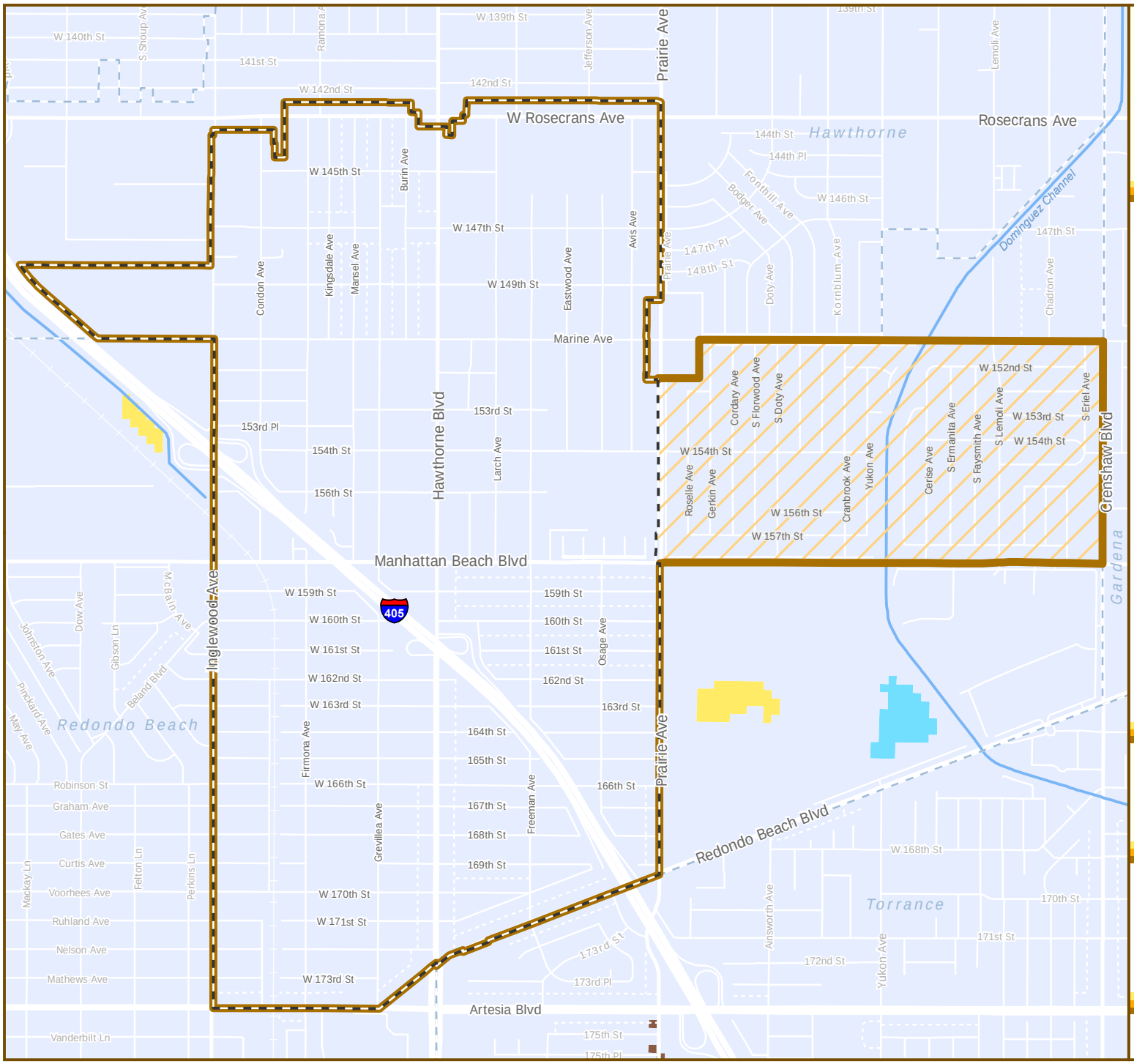
Guzy, G. and Anderson, R., *Memorandum: Supreme Court Ruling Concerning CWA Jurisdiction of Isolated Waters: U.S. Environmental Protection Agency and Army Corps of Engineers*, January 2001.

United States Environmental Protection Agency, *Section 404 of the Clean Water Act: How Wetlands are Defined and Identified*, https://www.epa.gov/cwa-404/how-wetlands-are-defined-and-identified-under-cwa-section-404, accessed September 20, 2021.

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.4-1.
Land Cover Types



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

Land Cover Type

- Annual Grassland
- Lacustrine
- Pasture
- Urban

0 500 1,000
Feet

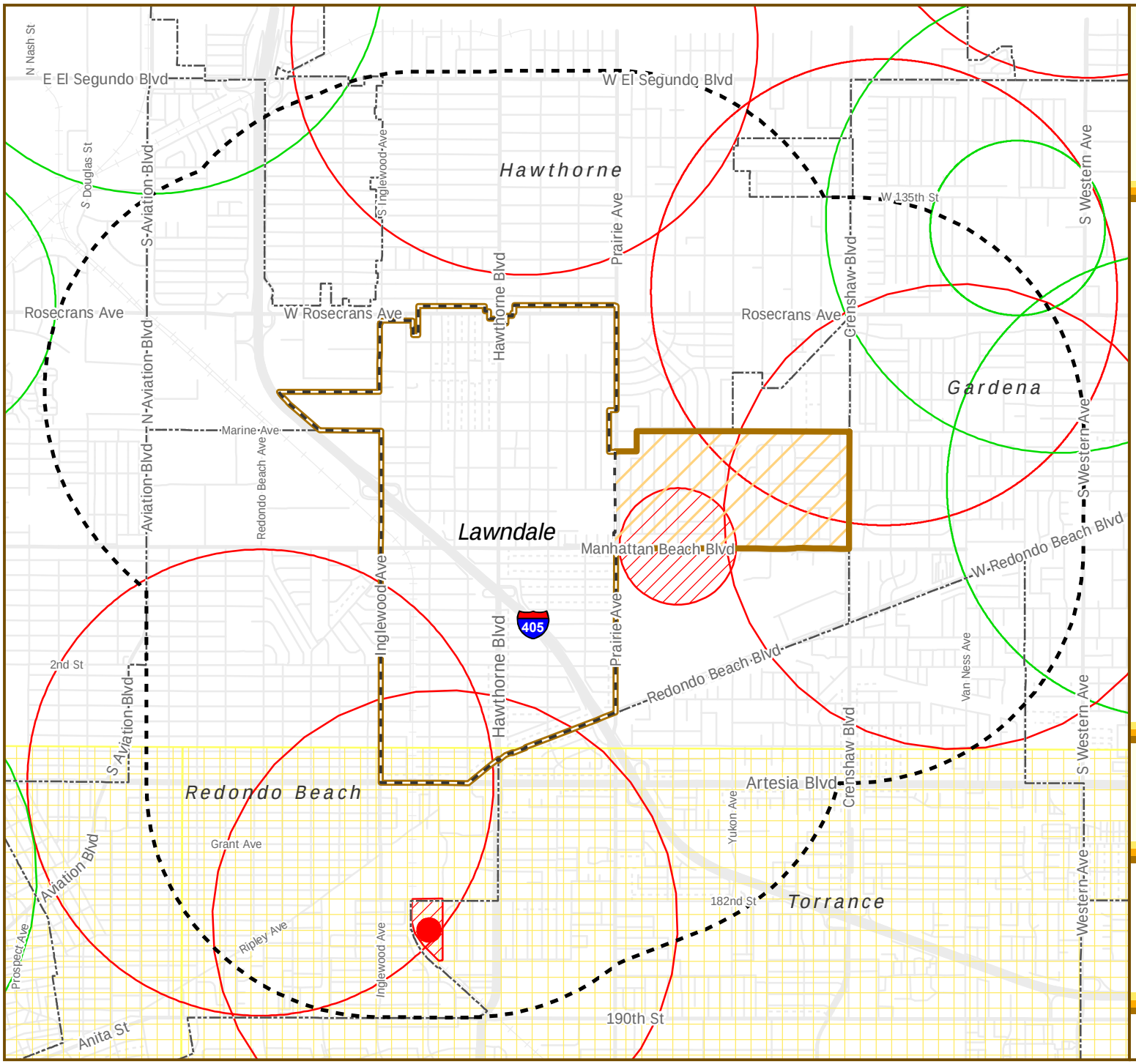
Sources: City of Lawndale; Los Angeles County; CAL FIRE
fveg15_1. Map date: June 22, 2023

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.4-2. California Natural Diversity Database

1-Mile Radius Search

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- 1-mile Radius of Planning Area
- Adjacent Incorporated Area

Special Status Species Occurrences*

- Plant (circular)
- Animal (80m)
- Animal (non-specific)
- Animal (circular)
- Sensitive EO's (Commercial only)

** The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.*

0 1,000 2,000
Feet

Sources: City of Lawndale; Los Angeles County; California Natural Diversity Database (CNDDB) version3/1/2022.
Date: June 20, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.5 CULTURAL RESOURCES

5.5.1 PURPOSE

This section identifies existing cultural (including historic and archeological resources) resources within the Planning Area, and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the *Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County* (Cultural Study), prepared by Duke Cultural Resources Management, LLC and dated October 2020 and updated July 2023; refer to Appendix D, *Cultural and Paleontological Resources Study*.

For impacts specific to tribal cultural resources, refer to Section 5.18, *Tribal Cultural Resources*.

5.5.2 ENVIRONMENTAL SETTING

ETHNOGRAPHIC OVERVIEW

The Planning Area is located within the boundaries of Gabrielino or Tongva Indians. The Gabrielino Indians are named because of their association with the Mission San Gabriel Arcángel. The Gabrielino are one of the least known Native American groups in California. Generally, their territory included all of the Los Angeles Basin, parts of the Santa Ana and Santa Monica Mountains, along the coast from Aliso Creek in the south to Topanga Canyon in the north, and San Clemente, San Nicolas, and Santa Catalina Islands.

The Gabrielino spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrielino shared this language with their neighboring groups to the south and east.

Groups of Gabrielino lived in villages that were autonomous from other villages. Each village had access to hunting, collecting, and fishing areas. Villages were typically located in protected coves or canyons near water. Acorns were the most important food for the Gabrielino, although the types and quantity of different foods varied by season and locale. Other important sources of food were grass and many other seed types, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals.

Typically, Gabrielino women gathered and men hunted, although work tasks often overlapped. Each village had a chief who controlled religious, economic, and warfare authorities. The chief had an assistant and an advisory council who assisted in important decisions and rituals. Each of these positions was hereditary being passed down from generation to generation. According to mapping of Gabrielino villages undertaken by McCawley, no known villages would be located within the City of Lawndale. The two nearest Gabrielino villages, which may compose large areas rather than just a single location, are Swaanga, approximately 10 miles to the southeast, and Waachnga, approximately five miles to the northwest. The Kirkman-Harriman Pictorial and Historical Map of Los Angeles also does not identify any Gabrielino villages within the City.

HISTORICAL CONTEXT

In California, the historic era is generally divided into three periods: the Spanish or Mission Period (from 1769 to 1821), the Mexican or Rancho Period (from 1821 to 1848), and the American Period (from 1848 to Present). The first Europeans in California were the Spanish. In 1542, Juan Rodriguez Cabrillo entered what was to become known as San Diego Harbor where he met a group of Kumeyaay Indians while on shore. Over the next few hundred years there were several maritime excursions along the California coast, but it would be more than 225 years until the Spanish established a permanent settlement. To protect its interests, Spain sent four excursions into California, two by land and two by sea. The entire expedition was led by Captain Gaspar de Portolá, military commander of California. Portolá came through the Los Angeles basin area in 1769 while travelling from San Diego to Monterey. To fulfill some of the religious goals of the expedition, Father Junípero Serra was sent to California to establish a system of Catholic Missions. It was not until two years later on September 8, 1771 that Mission San Gabriel Arcángel was established by Fathers Pedro Cambon and Angel Somera.

Ten years later on September 4, 1781, Los Angeles was founded. Early settlers farmed and they built a system of *zanjas*, or irrigation ditches, to transport water from the Los Angeles River to plots of land. With Mexican Independence in 1821, Los Angeles and California experienced great economic independence and growth. By 1822, the Mexican government began to grant permits to its citizens along the southern coast for animal pasture. Governor of Alta California, Juan Alvarado, gave the *Rancho Sausal Redondo* land grant to Antonio Ignacio Ávila, son of Spanish soldier Cornelio Ávila, that encompasses the present-day cities of Lawndale, Inglewood, Hawthorne, Redondo Beach, Manhattan Beach, and Hermosa Beach. The total acreage of the land grant was roughly 40,000 acres; but when the United States Land Commission confirmed title, *Rancho Sausal Redondo* was reduced to 22,000 acres. The City of Lawndale is located in what was the southwestern corner of *Rancho Sausal Redondo*. Between 1820 and 1841, the population of Los Angeles tripled to 1,680. California was ceded to the U.S. in 1848 with the signing of the Treaty of Guadalupe Hidalgo.

The Treaty of Guadalupe Hidalgo assured owners that prior, valid land grants would be honored if a claim was filed as required by the Land Act of 1851. Soon after, Antonio Ignacio Ávila filed a claim for *Rancho Sausal Redondo* and was awarded a patent in 1855 by the Public Land Commission. He later died in 1858 and his heirs sold the *Rancho* to pay for the probate costs. In 1868, ten years after his death, a Scottish nobleman named Sir Robert Burnett purchased the land grant from Ávila's heirs. Having also acquired the *Aquaje de la Centinela* parcel, Burnett combined both areas and named it Centinela Ranch. After doing so, Burnett gradually slowed cattle ranching and began to incorporate his prior specialization of sheep raising. In 1873, Burnett leased Centinela Ranch to Daniel and Catherine Freeman and returned to his home in Scotland. The Freeman's continued to raise sheep but after a tumultuous two-year drought from 1875 to 1876, they began to plant barley along with several thousand citrus, almond, olive, and eucalyptus trees. The Freeman's made dry-land farming profitable and exported 3,000,000 bushels of barley and other crops to Liverpool and London well in to the 1880s.

The City of Lawndale

The history of what later would be Lawndale begins with the opening of the Redondo seaport in 1890 and the railroad service created between the port and Los Angeles. By 1902, the Los Angeles and Redondo

railways passed along in what is now Hawthorne Boulevard, extending from Inglewood to Railroad Avenue. In March of 1905, real estate developer Charles B. Hopper subdivided and opened the southern portion of Centinela Ranch and named it Lawndale. It was marketed as an ideal poultry farming location for early settlers, but unfortunately a lack of buyers forced Hopper to change to smaller lots a year later. When the U.S. Census was taken in 1910, the unincorporated town of Lawndale had reached 142 residents. In the 1920s the discovery of oil transformed the Lawndale community into a town that built oil derricks, though the Great Depression muted this economic development. After World War II, Lawndale boomed primarily due to subsidized veteran housing and increased accessibility of the Harbor Freeway (I-110). Also, the Businessman's Group Association created zoning policies to promote and advertise the residential, commercial, and industrial advantages of Lawndale. Amid rapid commercial growth and urbanization of the Centinela Valley in 1958, zoning restrictions officially abolished agriculture in the community. On December 28, 1959, Lawndale was incorporated as a City in Los Angeles County.

CULTURAL RESOURCES

A search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SSCIC) located at the California State University, Fullerton was conducted on June 9 2020. The records search covered the entire City of Lawndale. In addition, a variety of other sources were consulted, including the California State Historic Property Data File (which includes the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest), the Built Environment Resource Directory (BERD), California Office of Historic Preservation's Historic Resources Inventory (HRI) directory, as well as a review of known cultural resource surveys, excavation reports, and historic aerial photos and maps. Further, a reconnaissance field survey was conducted in order to gather baseline data on the present state of previously recorded archaeological and historic resources within the Planning Area.

Results of the SCCIC and BERD records search indicate that 12 historic built environment resources are recorded within the City; refer to Table 5.5-1, *Cultural Resources Recorded within the Planning Area*.

Table 5.5-1
Cultural Resources Recorded within the Planning Area

Primary No. or BERD No.	Resource Age	Characteristics	Year Recorded	NHRP/ CRHP Status*
P-19-178543	1972	Single Family Property (HP2) at 16713 Firmona Ave	Unknown	7R
P-19-188892	1959	Educational Building Complex	2010	U
P-19-188893	Unknown	Educational Building Complex	2010	3CS
P-19-190021	Unknown	Commercial Building, 3 stories and under	2012	6Z
481616	1935	Single Family Property at 4724 W 159th St	1993	U
480244	1941	Single Family Property at 4523 W 167th St	1993	U
483066	1939	Single Family Property at 4609 W 167th St	1993	U
483164	1936	4726 W 167th St	1993	U
481694	1935	Multiple Family Property (HP3), 2-4 unit at 4562 W. 172nd St	1993	U
561704	1946	Urban Open Space, Alondra Park, at 3850 Manhattan Boulevard	2003	U
574962	1923	Government Building (HP14), City Hall at 14717 Burin Ave	1997	U
681590	1955	Commercial Building, 3 stories, at 16715 Hawthorne Boulevard	2018	U

Source: Duke Cultural Resources Management, 2023.
*NHRP/CRHP Key
3CS Appears eligible for CR as an individual property through survey evaluation
6Z Found ineligible for NR, CR or Local designation through survey evaluation
7R Identified in Reconnaissance Level Survey: Not evaluated.
U Unknown Information

No archaeological resources have been recorded within the City. This lack of identified resources is likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites.

All historic built environment resources located within the City are surrounded by paved asphalt parking lots, commercial buildings, and/or single-family residential homes. None of the resources were accompanied by any historic archaeological deposits, nor were any prehistoric cultural resources identified. Records for three of the 12 historic built environment resources were provided by the SCCIC. A brief description of the three historic built environment resources which contained records from the SCCIC is provided below.

P-19-188892

According to the SCCIC search, Resource P-19-188892 is the Lawndale High School Campus complex. First constructed in 1959, it was built to accommodate the postwar growing population needs of the newly founded City of Lawndale. The core campus consists of an administration building, a cafeteria, classroom buildings, support buildings, athletic fields, and a parking lot. The original campus was a series of one- and two-story brick and cinder block buildings with low pitched roofs constructed on concrete pads. Windows

consisted of steel framed fixed and casements. The campus complex was recommended as not historically significant.

P-19-188893

According to the SCCIC search, Resource P-19-188893 is the Leuzinger High School complex. It is the earliest high school built in the City in 1930, shortly after the Great Depression. It consisted of a main administration building, a cafeteria, an Olympian gym and a classroom building. It was named in honor of Adolph Leuzinger, who was a member of the Inglewood Union High School District Board of Trustees for 25 consecutive years. The campus was later expanded in 1956 with the addition of a new cafeteria, locker rooms north of the Olympic gymnasium, and classroom buildings 2, 3, 4, and 5. By 1976, a locker room, the Thompson gym, and classroom buildings 6, 7, and 8 had been added. Leuzinger High School was recommended to be considered a significant cultural resource under CEQA, and therefore qualifies as a historical resource eligible for listing in the CRHR. Additionally, it was recommended that any additional alterations or demolition to the Olympic Gymnasium and/or Memorial Garden be avoided while any alterations to the interior of the Main Administration Building be kept to a minimum.

P-19-190021

Located in a commercial zone in the City of Lawndale, 16720 Hawthorne Boulevard is a two-story retail building and a 10-vehicle parking lot first constructed in 1947. Designated as Tract 8293, Lot Number 106 and 107, this 6,000-square-foot retail building measures roughly 50 feet wide by 105 feet long. Much of the construction is reinforced masonry on a concrete foundation and clad with stucco. The building has a flat roof covered with asphalt and gravel. The roof has a stepped parapet and fenestration that consists of an enframed window wall on the front with metal frames that span the length of the building. There are no records of the original site plan or building permit; however, a building permit indicates that by 1970 the building was used for office space by the Mattel Toymakers Federal Credit Union. Building permits show that by 2003 the building was remodeled with the addition of a bathroom, a storefront, and stairs, as well as the demolition of a partition wall. The property does not appear to qualify for the NRHP.

Results of Reconnaissance Field Survey

A reconnaissance-level overview of the City was conducted by Nicholas F. Hearth of Duke CRM on April 29, 2020. The reconnaissance survey consisted of surveying the City to get a general sense of the potential historical nature and visits to locations of built environment resources indicated in the City's existing General Plan (1992 General Plan). The reconnaissance-level survey of the City revealed that land uses within Lawndale are predominantly residential, though commercial development is also present, especially along Hawthorne Boulevard.

The City's 1992 General Plan identifies 32 locations of historic structures. Of these 32 locations, 17 are still extant and were visited during the field survey; refer to Table 5.5-2, *Potential Built Environment Resources Locations Visited during Reconnaissance Survey*. The remaining 15 historic structures noted in the 1992 General Plan appear to be removed or are so altered as to be unrecognizable.

Table 5.5-2
Potential Built Environment Resources Locations Visited during Reconnaissance Survey

BERD No.	Address (approximate)	Notes and Condition
N/A	16700 Prairie Ave.	Single family residence, Extant
N/A	4039 160th St.	Single family residence, Extant
N/A	4061 159th St.	Single family residence, Extant
N/A	4061 W. 147th St.	Single family residence, Extant
N/A	14752 Prairie Ave.	Single family residence, Extant
N/A	14615 Osage Ave.	Single family residence, Extant
N/A	4118 W. 147th St.	Single family residence, Extant
N/A	14606 Freeman Ave	Single family residence, Extant
N/A	NW Corner of 149th and Larch	Single family residence, Likely extant (view obscured)
N/A	14814 Grevillea Ave.	Single family residence, Extant
N/A	4625 154th St.	Single family residence, Extant
N/A	4630 154th St.	Single family residence, Extant
N/A	4555 171st.	Single family residence, Extant
574962	14717 Burin Ave.	City Hall, Extant
481616	4724 159th St.	Single family residence, Extant
480244	4523 167th St.	Single family residence, Extant
681590	16715 Hawthorne Boulevard	Commercial Building, 3 stories, NRHP status 6Y*

Source: Duke Cultural Resources Management, 2023.
*NHRP/CRHP Key
6Y Determined ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing.

Twelve built environment resources are recorded at the SCCIC and in the BERD. The City's 1992 General Plan lists 32 historic structures. Through the reconnaissance survey it was determined 17 of the 32 structures are extant, the remaining 15 have either been demolished or are so disturbed so as to be unrecognizable. Four of these 17 were also listed at the SCCIC/BERD bringing the total historic structures recorded in the City to 25. None are listed on the NRHP or CRHR.

5.5.3 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at Federal, State, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

Section 106 Process

Through regulations associated with the NHPA, an impact to a cultural resource would be considered significant if government action would affect a resource listed in or eligible for listing in the NRHP. The NHPA codifies a list of cultural resources found to be significant within the context of national history, as determined by a technical process of evaluation. Resources that have not yet been placed on the NRHP, and are yet to be evaluated, are afforded protection under the Act until shown not to be significant.

Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations Part 800) state that for a cultural resource to be determined eligible for listing in the NRHP, the resource must meet specific criteria associated with historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are applied within an analysis when there is some question as to the significance of a cultural resource. The criteria for evaluation are defined as the quality of significance in American history, architecture, archeology, engineering, and culture. This quality must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of the following criteria:

- Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: It is associated with the lives of persons significant in our past; or
- Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible cultural resources must meet at least one of the above criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

The Section 106 evaluation process does not apply to projects undertaken under City environmental compliance jurisdiction. However, should the undertaking require funding, permits, or other administrative actions issued or overseen by a Federal agency, analysis of potential impacts to cultural resources following the Section 106 process would likely be necessary. The Section 106 process typically excludes cultural resources created less than 50 years ago unless the resource is considered highly significant from the local perspective. Finally, the Section 106 process allows local concerns to be voiced and the Section 106 process must consider aspects of local significance before a judgment is rendered.

Secretary of the Interior's Standards for the Treatment of Historic Properties

Evolving from the Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards that were developed in 1976, the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings were published in 1995 and codified as 36 Code of Federal Regulations

Part 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources." "Preservation" acknowledges a resource as a document of its history over time, and emphasizes stabilization, maintenance, and repair of existing historic fabric. "Rehabilitation" not only incorporates the retention of features that convey historic character, but also accommodates alterations and additions to facilitate continuing or new uses. "Restoration" involves the retention and replacement of features from a specific period of significance. "Reconstruction," the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

STATE

California Environmental Quality Act

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources, or any object building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource is considered historically significant if it meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]). Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Register of Historical Resources (CRHR)

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

Public Resources Code Section 5097 (Related to Cultural Resources)

California Public Resources Code (PRC) Section 5097 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the CEQA Guidelines.

The NAHC, created by statute in 1976 (AB 4239), is a nine-member body, appointed by the Governor to identify, catalog, and protect cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands (i.e., Sacred Lands File), and reviewing current administrative and statutory protections related to these sacred sites.

PRC Sections 5097.9 through 5097.991 establish that no public agency or private party using or occupying public property (or operating on under a public license, permit, grant, lease or contract made after July 1, 1977) shall in any manner interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution. It also prohibits such agencies and parties from causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require it.

These sections also establish the State's NAHC. The NAHC is tasked with working to ensure the preservation and protection of Native American human remains, associated grave goods and cultural resources. Towards this end, the NAHC has a strategic plan for assisting the public, development communities, local and Federal agencies, educational institutions and California Native Americans to better understand problems relating to the protection and preservation of cultural resources and to serve as a tool to resolve these problems. In 2006, PRC Sections 5097.91 and 5097.98 were amended by Assembly Bill 2641 to authorize the NAHC to bring legal action when necessary to prevent damage to

Native American burial grounds or places of worship. It also established more specific procedures to be implemented in the event that Native American remains are discovered.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

LOCAL

City of Lawndale Municipal Code

The Lawndale Zoning Code Chapter 17.30, *Design Review*, requires design review and approval for applicable development projects. The reviewing body must make the following findings: that the proposed development site plan and the building design features will integrate harmoniously and enhance the character and design of both the immediate neighborhood and the surrounding area; that the site plan and building design will improve the community appearance by preventing extremes of building bulk and mass; that the site plan and design of the buildings, parking areas, landscaping, illumination and other design features demonstrate that proper consideration has been given to both the functional aspects of the site development and the visual effects as seen from public spaces; and that the site plan and building design substantially conform to the City's adopted design guidelines.

Mills Act Program

The City of Lawndale adopted the Mills Act program in December 2010. The Program allows owners of qualified historic properties to apply for a Mills Act contract if they pledge to rehabilitate and maintain the historical and architectural character of their properties for the minimum ten-year life of the contract. Mills Act contracts are executed between a property owner and the City of Lawndale. Because valuations of Mills Act properties are determined by an income approach to value rather than by the standard market approach to determining appraised value, Mills Act participants may realize substantial property tax savings each year.

Historic Plaque Program

Award of a Historic Preservation Plaque recognizes and honors the careful preservation of older homes and other buildings. Eligibility for a plaque is based on the following criteria: the building must be 50 years or older; the building must be in good condition, and the building's exterior must have been preserved, maintained, or rehabilitated (or sensitively enlarged) in accordance with its original architectural style and detailing. Preference will be given to buildings that were either owned by a prominent person or family or are historically significant to the community, as well as those that are good examples of one or more architectural styles. This program is administered free of charge to the property owner by the Lawndale Historical Society and the City of Lawndale.

5.5.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to cultural resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 (refer to Impact Statement CUL-1);
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 (refer to Impact Statement CUL-2); and/or
- Disturb any human remains, including those interred outside of formal cemeteries (refer to Impact Statement CUL-3).

5.5.5 IMPACTS AND MITIGATION MEASURES

CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

Impact Analysis: Known historic resource sites are located throughout the Planning Area, as described above, and undiscovered or potentially eligible sites may be located in various areas of the Planning Area. Redevelopment and alteration of existing structures has the potential to impact known and potentially eligible historical resources. A substantial adverse change in the significance of an historic resource is defined in Section 15064.5 (b)(1) of the CEQA Guidelines as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

According to officially recorded resources and other databases that were researched for the Project, 25 historic built environment resources are located within the City, as documented in Table 5.5-1, and Table 5.5-2. These historic resources are scattered throughout the Planning Area and vary in terms of type, architectural style, condition, and alteration history. While the General Plan Update does not directly propose any changes to any historic resources, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of known historical resources or unknown historical resources which have not yet been identified. This is considered a potentially significant impact.

The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including historical resources. Proposed Policy RM-3.1 requires the City to protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.4 directs the City to include the public in efforts to preserve cultural assets, including techniques, incentives, and legal requirements for preservation. Policy RM-3.6 directs the City to evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation

alternatives when considering the demolition or movement of historic structures. Policy RM-3.7 encourages the City to seek funding and support from public and private sources that aim to protect cultural and historic resources within the City. Action RM-3a requires the assessment of development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3b directs the City to evaluate the feasibility of implementing a local historic registry program that provides incentives for retrofitting and building maintenance, as well as public recognition, of the local resource. Action RM-3c directs the City to consider conducting a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance. Action RM-3d requires, for structures that potentially have historic significance, that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings or relocating the historic building as feasible.

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations relative to historic and potentially historic resources. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. For structures that potentially have historical significance, the City would require preparation of a study by a qualified professional archaeologist or historian to determine the significance of the structure and potential impacts of the proposed development in compliance with CEQA. Therefore, compliance with the General Plan Update policies and actions and existing regulations, would not cause a substantial adverse change in the significance of a historical resource and impacts would be less than significant.

Proposed General Plan Update Goals, Policies and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: **Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: **Documentation.** Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.3: **Cultural Reminders.** Seek to incorporate reminders of the City's culture through adaptive reuse, signage, markers, cultural events, and other reminders of Lawndale's community identity and local history.

Policy RM-3.4: **Public Education.** Educate and actively involve the public in preserving cultural assets, including techniques, incentives, and legal requirements for preservation.

Policy RM-3.6: **Historic Preservation.** Evaluate the condition of historical buildings, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives when

considering the demolition or movement of historic structures; when possible, encourage the adaptive re-use of the historic structure.

Policy RM-3.7: **Funding.** With input and involvement of stakeholder groups, seek adequate funding and support from public and private sources that aim to protect cultural and historic resources within the City.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3b: Evaluate the feasibility of implementing a local historic registry program that provides incentives for retrofitting and building maintenance, as well as public recognition, of the local resource.

Action RM-3c: Consider conducting a historic properties inventory that takes into consideration buildings, neighborhoods, and other features of historic, architectural, or cultural significance.

Action RM-3d: For structures that potentially have historic significance, the City shall require that a study be conducted by a professional archaeologist or historian to determine the actual significance of the structure and potential impacts of the proposed development in accordance with CEQA Guidelines Section 15064.5. The City may require modification of the project and/or mitigation measures to avoid any impact to a historic structure, when feasible, such as retaining or rehabilitating historic buildings or relocating the historic building as feasible.

Action RM-3e For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Impact Analysis: Redevelopment and development of previously undeveloped areas have the potential to impact known and unknown archaeological resources. Surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with construction activities.

Although the records search identifies no previously-recorded archaeological resources within the City, the Cultural Study concludes the lack of identifies resources is likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites. Effects on archaeological resources deemed to be significant could be considered adverse if they involve physical demolition, destruction, or alteration of the resource or its immediate surroundings such that the significance of a resource would be materially impaired. While the General Plan Update does not directly propose site-specific development with the potential to directly impact archaeological resources, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of previously undiscovered archaeological resources. This is considered a potentially significant impact.

The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including archaeological resources. Proposed Policy RM-3.1 requires the City protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.4 directs the City to include the public in efforts to preserve cultural assets, including techniques, incentives, and legal requirements for preservation. Policy RM-3.7 encourages the City to seek funding and support from public and private sources that aim to protect cultural and historic resources within the City. Action RM-3a requires that development proposals be assessed for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3e requires, for all development proposals within areas with the potential to contain prehistoric/historic resources, a study to be conducted by a professional archaeologist to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Archaeological resources are protected under Federal, State, and local regulations as described above and implementation of General Plan Update policies and actions would reduce potential adverse impacts to archaeological resources associated with future development. Subsequent discretionary development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of an archaeological resource and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: Preservation. Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: **Documentation.** Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.4: **Public Education.** Educate and actively involve the public in preserving cultural assets, including techniques, incentives, and legal requirements for preservation.

Policy RM-3.7: **Funding.** With input and involvement of stakeholder groups, seek adequate funding and support from public and private sources that aim to protect cultural and historic resources within the City.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3e: For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

CUL-3: Disturb any human remains, including those interred outside of formal cemeteries?

Impact Analysis: Future construction projects within the Planning Area could have the potential to disturb or destroy buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries.

Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. In the event that human remains are discovered during ground disturbing activities, the County coroner must be called in to assess the remains (Section 15064.5[e] of the CEQA Guidelines). If the County coroner determines that the remains are those of a Native American, the Native American Heritage Commission (NAHC) must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in Section 15064.5 of the CEQA Guidelines must be followed.

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations. Subsequent discretionary development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of

human activity." Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that Native American human remains are inadvertently discovered during development activities.

The General Plan Update Resource Management Element includes policies and actions addressing the potential discovery of human remains. Proposed Policy RM-3.1 requires the City protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.5 requires consultation with Native American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Action RM-3g requires, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, that the City halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains is permitted until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site. Compliance with the General Plan Update policies and actions and existing regulations, including Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and PRC Section 5097.98, would ensure that potential impacts associated with the inadvertent discovery of human remains would be reduced to less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: **Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.5: **Tribal Consultation.** In accordance with State, local, and Tribal intergovernmental consultation requirements, consult with Native American tribes that may be impacted by proposed development and land use policy changes, as necessary.

Action RM-3g: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains

and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.5.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to cultural resources may occur. The cumulative projects' regional geologic setting and cultural resource deposit sensitivity would be similar; however, the local geologic setting and historical significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Impact Analysis: Previously recorded historic built environment resources have been identified within the City. Additionally, due to the age of development within the City, there is the potential for eligible historical resource sites to be located within the Planning Area. Future development and cumulative development within the Planning Area has the potential to impact known and potentially eligible historical resources. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to historical resources. This would include studies of historical resources that are present or could be present within a development site. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Additionally, the General Plan Update Resource Management Element includes policies and actions that would address historical resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on historical resources to a less than significant level. Based on the above, the Project's incremental contribution to cumulative historical resource impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Impact Analysis: No previously recorded cultural resources have been identified within the City; however, undiscovered archeological sites may be located within the Planning Area. Future development and

cumulative development within the Planning Area has the potential to impact previously undiscovered archaeological resources. As with the Project, the related cumulative projects would undergo environmental review pursuant to CEQA to evaluate potential impacts to archaeological resources. This would include studies of archaeological resources that are present or could be present within a development site. Additionally, related projects would be subject to compliance with the established Federal, State, and local regulatory framework concerning the protection of cultural resources on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Additionally, the General Plan Update Resource Management Element includes policies and actions that would address archeological resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on archeological resources to a less than significant level. Based on the above, the Project's incremental contribution to cumulative archaeological resource impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis: Although unlikely, there is the potential that previously undiscovered human remains could be encountered during construction activities associated with future development within the Planning Area. Future development projects would be required to comply with the established State regulatory framework regarding human remains. Related cumulative projects would undergo environmental review on a project-by-project basis to evaluate the site-specific archaeological sensitivity. Additionally, related projects would be subject to compliance with the established State and local regulatory framework, including the General Plan Update policies and actions, concerning the discovery of human remains on a project-by-project basis. The proposed Project's compliance with the regulatory framework regarding the discovery of human remains would reduce potential Project impacts to a less than significant level; thus, the Project's incremental contribution to cumulative impacts to human remains would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.5.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts to cultural resources associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to cultural resources would occur as a result of the General Plan Update.

5.5.8 REFERENCES

Duke Cultural Resources Management, LLC, *Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County*, October 2020, updated July 2023.

This page intentionally left blank.

5.6 ENERGY

5.6.1 PURPOSE

This section identifies the existing energy use conditions withing the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the air quality emissions analysis and modeling prepared by De Novo Planning Group, and included as Appendix C, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

5.6.2 ENVIRONMENTAL SETTING

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel and natural gas) are the most widely used form of energy in the State (U.S. Energy Information Administration 2023a). However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 33 percent of electricity generated from renewable resources by 2020, and 60 percent by 2030.

Overall, in 2020, California's per capita energy usage was ranked 48th in the nation at 175 million British thermal units (Btu) per capita (U.S. Energy Information Administration 2023a). Additionally, California's per capita rate of energy usage has been reduced by approximately one third since the 1970s (U.S. Energy Information Administration 2022). Many State regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State constrained.

The consumption of nonrenewable energy (primarily gasoline and diesel fuel) associated with the operation of passenger, public transit, and commercial vehicles results in greenhouse gas (GHG) emissions that ultimately result in global climate change. Other fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

ELECTRICITY CONSUMPTION

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Approximately 70 percent of the electrical power needed to meet California's demand is produced in the State, while the remaining 30 percent is imported from the Pacific Northwest and the Southwest (California Energy Commission 2023a). In 2021, California's in-state generated electricity was derived from natural gas (50.2 percent), nuclear sources (8.5 percent), large hydroelectric resources (6.2 percent), coal (0.2 percent), and renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (34.8 percent). The percentage of

renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed the State's Renewable Portfolio Standard (RPS).

Southern California Edison (SCE) provides electricity to the Planning Area. SCE, a subsidiary of Edison International, serves approximately 185 cities in 15 counties across central and Southern California (Southern California Edison, 2019). According to the California Energy Commission (CEC), approximately 103,597 million kilowatt-hours (GWh) of electricity were used in SCE's service area in 2020 (California Energy Commission 2023b). This is approximately 38 percent of the State total system electric generation of 272,576 GWh in 2020, which was a two percent decrease from the previous year (California Energy Commission 2023c). Los Angeles County's total electricity consumption in 2020 (residential and non-residential) was approximately 65,650 GWh (California Energy Commission 2023d).

NATURAL GAS

Natural gas supplies are derived from underground sources and brought to the surface at gas wells. Once it is extracted, gas is purified and the odorant that allows gas leaks to be detected is added to the normally odorless gas. Natural gas suppliers, such as Southern California Gas Company (SoCalGas), then send the gas into transmission pipelines, which are usually buried underground. Compressors propel the gas through the pipeline system, which delivers it to homes and businesses.

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest. In 2020, California produced 144 billion cubic feet of natural gas. SoCalGas provides natural gas for residential, industrial, and agency consumers within the Planning Area.

PETROLEUM

The primary energy source for the United States is petroleum (oil), which is refined to produce fuels like gasoline, diesel, and jet fuel (U.S. Energy Information Administration 2023b). Petroleum is a finite, nonrenewable energy source. California used approximately 524 million barrels of petroleum in 2020, with the majority (433 million barrels) used for the transportation sector (U.S. Energy Information Administration 2023c). This total annual consumption equates to a daily use of approximately 1.4 million barrels of petroleum.

5.6.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with Federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Compliance Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the Country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain Federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the Act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy and rural community electrification; and establishes a Federal purchase requirement for renewable energy.

Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA (49 U.S.C. § 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained

factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with Federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

STATE

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as CEC. The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 Energy Action Plan II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues, and research and development activities. The CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

State of California Energy Action Plan

The CEC is responsible for preparing the State Energy Action Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the 1997 California Energy Plan. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

Assembly Bill 1493

In response to AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of Federal preemption of California's Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the state, Federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, Executive Order (EO) B-48-18 was signed into law and requires all State entities to work with the private sector to have at least five million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This Executive Order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program, and recommend how to ensure affordability and accessibility for all drivers.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards (Standards), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code.

The 2022 update to the California Building Energy Efficiency Standards (the current version of the Standards) went into effect on January 1, 2023. The Standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the Standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

Renewable Portfolio Standard

In 2002, the Legislature enacted Senate Bill 1078 (Stats. 2002, ch. 516), which established the Renewables Portfolio Standard program, requiring retail sellers of electricity, including electrical corporations, community choice aggregators, and electric service providers, to purchase a specified minimum percentage of electricity generated by eligible renewable energy resources such as wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. (See Pub. Utilities Code, Section 399.11 et seq. [subsequently amended].) The legislation set a target by which 20 percent of the State's electricity would be generated by renewable sources. (Pub. Utility Code, Section 399.11, subd. (a) [subsequently amended].) As described in the Legislative Counsel's Digest, Senate Bill 1078 required "[e]ach electrical corporation … to increase its total procurement of eligible renewable energy resources by at least one percent per year so that 20 percent of its retail sales are procured from eligible renewable energy resources. If an electrical corporation fails to procure sufficient eligible renewable energy resources in a given year to meet an annual target, the electrical corporation would be required to procure additional eligible renewable resources in subsequent years to compensate for the shortfall, if funds are made available as described. An electrical corporation with at least 20 percent of retail sales procured from eligible renewable energy resources in any year would not be required to increase its procurement in the following year."

In 2006, the Legislature enacted Senate Bill 107 (Stats. 2006, ch. 464), which modified the Renewables Portfolio Standard to require that at least 20 percent of electricity retail sales be served by renewable energy resources by year 2010. (Pub. Utility Code, Section 399.11, subd (a) [subsequently amended].)

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set even more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must meet renewable energy goals of 20 percent of retail sales from renewables by the end of

2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].)

SB 350, discussed above, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) Of equal significance, Senate Bill 350 also embodies a policy encouraging a substantial increase in the use of electric vehicles. As noted earlier, Section 740.12(b) of the Public Utilities Code now states that the PUC, in consultation with CARB and the CEC, must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, … and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

Executive Order, B-16-12, issued in 2012, embodied a similar vision of a future in which zero-emission vehicles (ZEV) will play a big part in helping the State meet its GHG reduction targets. Executive Order B-16-12 directed State government to accelerate the market for in California through fleet replacement and electric vehicle infrastructure. The Executive Order set the following targets:

- By 2015, all major cities in California will have adequate infrastructure and be "ZEV ready";
- By 2020, the State will have established adequate infrastructure to support 1 million ZEVs in California;
- By 2025, there will be 1.5 million ZEVs on the road in California; and
- By 2050, virtually all personal transportation in the State will be based on ZEVs, and GHG emissions from the transportation sector will be reduced by 80 percent below 1990 levels.

In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50 percent renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60 percent target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

In summary, California has set a statutory goal of requiring that, by 2030, 60 percent of the electricity generated in California should be from renewable sources, with increased generation capacity sufficient to allow the mass conversion of the statewide vehicle fleet from petroleum-fueled vehicles to electrical vehicles and/or other ZEVs. By 2045, all electricity must come from renewable resources and other carbon-free resources. Former Governor Brown had an even more ambitious goal for the State of achieving carbon neutrality as soon as possible and by no later than 2045. This goal was reaffirmed in the Final 2022 Scoping Plan, which lays out a path to achieve State targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045. The Legislature is thus looking to California drivers to buy electric cars, powered by green energy, to help the State meet its aggressive statutory goal, created by SB 32, of reducing statewide GHG emissions by 2030 to 40 percent below 1990 levels. Another key prong to this strategy is to make petroleum-based fuels less carbon-intensive. A number of statutes in recent years have addressed that strategy.

Senate Bill 1078 (2002), Senate Bill 107 (2006), Executive Order S-14-08 (2008), Senate Bill 350 (2015), and Senate Bill 100 (2018), Assembly Bill 1279 (2022), Senate Bill 1020 (2022)

SB 1078 established the Renewable Portfolio Standard (RPS) program, which required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. This goal has subsequently been accelerated several times. SB 107 changed the target date to 2010 and Executive Order S-14-08 expanded the State's RPS to 33 percent renewable power by 2020. SB 350 expanded the RPS by requiring retail seller and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. SB 100 accelerated and expanded the standards set forth in SB 350 by updating the RPS program to 50 percent eligible renewable energy resources by 2025 and 60 percent by 2030. In addition, SB 100 sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045. Additionally, AB 1279, the California Climate Crisis Act, declares the policy of the state both to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter, and to ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below the 1990 levels. Lastly, SB 1020 revised state policy to require that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035.

LOCAL

City of Lawndale Climate Action Plan

The City of Lawndale, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce GHG emissions within the City. The City's CAP evaluates energy and other resource consumption within the jurisdiction and serves as a guide for action by setting energy efficiency and GHG emission reduction goals and policies to achieve desired outcomes over a 20-year period (2035). The CAP identifies community-wide strategies to conserve energy and reduce GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste.

Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 3.14, *Utility Users Tax*, imposes a tax for users of various utilities within the City in order to fund municipal utility services, including electricity, gas, and telephone.

5.6.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Consistent with Appendix G of the CEQA Guidelines, the project will have a significant impact on the environment associated with energy use if it will:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (refer to Impact Statement EN-1); and/or

- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency (refer to Impact Statement EN-1).

METHODOLOGY

In order to determine whether or not the proposed Project would result in a significant impact on energy use, this EIR includes an analysis of proposed Project energy use, as provided below. A description of the methodology used to estimate energy emissions is provided within the impact analysis.

The CEQA Guidelines require consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, a project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and Federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

5.6.5 IMPACTS AND MITIGATION MEASURES

EN-1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis: The proposed Project is the General Plan Update, with a horizon year of 2045. Buildout of the General Plan includes residential, commercial, office, industrial, mixed-use, open space, and other land uses (see Section 3.0, *Project Description* for further detail). The amount of energy used in the Planning Area at buildout would directly correlate to the type and size of development, the energy consumption associated with unit appliances, outdoor lighting, and energy use associated with other buildings and activities. Other major sources of Planning Area energy consumption include fuel used by vehicle trips generated during construction and operational activities, and fuel used by off-road and on-road construction vehicles during construction. The following discussion provides calculated levels of energy use expected for future development accommodated by the General Plan Update, based on commonly used modelling software (i.e. CalEEMod v.2022.1 and the California Air Resource Board's EMFAC2021). The following analysis provides an estimate of the energy consumption in the Planning Area in buildout year 2045.

ELECTRICITY AND NATURAL GAS

At 2045 buildout, the City of Lawndale's electricity and natural gas consumption would be used primarily to power buildings (all types of buildings, including residential, commercial, office, industrial, public, etc.).

Total annual electricity (kWh) and natural gas (kBTU) usage associated with operational activities at General Plan Update buildout are shown in Table 5.6-1, *Maximum Regional Construction Emissions (pounds/day)*, (as provided by CalEEMod). The analysis performed uses a 2045 buildout for a 20-year planning horizon.

Table 5.6-1
Maximum Regional Construction Emissions (pounds/day)

Electricity (kWh/year)	Natural Gas (kBTU/year)
258,114,808	947,517,417
Source: CalEEMod, v2022.1.	

According to CalEEMod's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings. The energy use from residential land uses is calculated based on the Residential Appliance Saturation Survey (RASS). Similar to CEUS, this is a comprehensive energy use assessment that includes the end use for various climate zones in California.

FUEL CONSUMPTION - ON-ROAD VEHICLES (OPERATION)

Implementation of the General Plan Update would generate vehicle trips during its operational phase. Based on the *Lawndale General Plan CEQA Transportation Analysis* prepared by Kittelson & Associates, Inc., dated July 12, 2023 (Appendix F), future development as a result of implementation of the General Plan Update could generate up to approximately 1,026,827 vehicle miles traveled (VMT) per year; however, the Project itself does not propose any specific development. In order to calculate operational on-road vehicle energy usage and emissions, default trip lengths generated by CalEEMod were used, which are based on the Planning Area location and urbanization level parameters (i.e., "Los Angeles County" and "Urban," respectively). These values are provided by the individual districts or use a default average for the State, depending on the location of the project. Based on Year 2045 gasoline and diesel miles per gallon (MPG) factors for individual vehicle classes as provided by EMFAC2021, a weighted MPG factor was derived for operational on-road vehicles of approximately 29.9 MPG for gasoline vehicles. With this information, as a conservative estimate, it was calculated that on-road vehicle energy usage in the Planning Area at buildout year 2045 would be approximately 34,367 gallons of gasoline per day, on average, or 12,544,095 annual gallons of gasoline fuel annually.

FUEL CONSUMPTION - ON-ROAD VEHICLES (CONSTRUCTION)

2045 buildout of the General Plan Update would also generate on-road vehicle trips during construction activities (from construction workers, vendors, and haulers). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths, and number of workers per construction phase as provided by CalEEMod (v 2022.1), and Year 2045 gasoline and diesel MPG factors provided by EMFAC2021. Table 5.6-2, *On-Road Mobile Fuel Generated by Project Construction Activities – By Phase*, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the

construction activities associated with buildout of the General Plan Update would occur during the building construction phase.

Table 5.6-2
On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	Total Daily Worker Trips	Total Daily Vendor Trips	Total Daily Hauling Trips	Gallons of Gasoline Fuel	Gallons of Diesel Fuel
Demolition	15	0	0	62,142	0
Site Preparation	18	0	0	74,571	0
Grading	20	0	0	82,857	0
Building Construction	9,990	3,657	0	2,069,342	1,447,872
Paving	15	0	0	62,142	0
Architectural Coating	1,998	0	0	413,868	0
Total	**N/A**	**N/A**	**N/A**	**2,764,922**	**1,447,872**
Source: CalEEMod, v2022.1.					

OFF-ROAD VEHICLES (CONSTRUCTION)

Off-road construction vehicles would use diesel fuel during construction activities. A non-exhaustive list of off-road constructive vehicles expected to be used during construction activities includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by buildout of the General Plan Update (as provided by the CalEEMod output in Appendix C, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*), and a CO_2 to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), future development as a result of implementation of the General Plan Update could use up to a total of 3,988,127 gallons of diesel fuel for off-road construction vehicles (during the demolition, site preparation and grading phases); however, the Project itself does not propose any specific development.

COMPLIANCE WITH STATEWIDE AND LOCAL ENERGY PLANS

Buildout of the General Plan Update would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel), and from off-road construction activities (e.g. diesel fuel) associated with 2045 buildout of the General Plan Update. Each of these activities would require the use of energy resources. Developers of individual projects within the Planning Area would be responsible for conserving energy, to the extent feasible, and would rely heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

Buildout of the General Plan Update would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, SCE is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its

energy portfolio. In addition, new development would be required to install on-site solar photovoltaic (PV) systems, consistent with the latest version of Title 24; this would greatly reduce the amount of electricity needed to be sent from the grid to the new developments associated with the proposed Project.

SCE is expected to achieve at least 60 percent renewables by 2030, and 100 percent zero-carbon electricity by 2045 (in compliance with Senate Bill 100). Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("Part 6"), would be applicable to future development accommodated by the General Plan Update. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Additionally, building new housing near new job opportunities would reduce commuting time and allow for opportunities for pedestrian transportation such as walking and biking to work, further reducing energy usage. Furthermore, additional project-specific sustainability features that individual development projects could implement would further reduce the energy consumption of individual projects. The General Plan Update would also be in compliance with the planning documents described previously within this section.

The General Plan Update would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. This is a less than significant impact, in this regard.

CONCLUSION

The General Plan Update includes policies and actions to support energy conservation and renewable energy, as well as reducing energy use. Specifically, Goal RM-5 promotes a community that safely manages its energy resources. Policy RM-5.1 requires the City to comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy. Policy RM-5.2 ensures that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code. Policy RM-5.3 requires the City to promote the development and use of renewable energy resources to reduce dependency on fossil fuels. Policy RM-5.4 requires the City to promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure. Policy RM-5.5 requires the City to promote energy conservation and recycling by the public and private sectors. Policy RM-5.6 requires the City to collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways. Policy RM-5.7 requires the City to support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations. Policy RM-5.8 requires the City to promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy. Policy RM-5.9 requires the City to promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers. Action RM-5a requires the City to implement energy conservation measures in public buildings through the following actions. Action RM-5b requires that during the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage

of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design. Action RM-5 requires the City to continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code. Action RM-5d requires the City to promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings. Action RM-5e requires the City to identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times. Action RM-5f requires the City to consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives. Action RM-5g requires the City to use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs. Further, Action RM-5h requires the City to partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

As a result, the General Plan Update would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for during General Plan Update buildout, including during construction, operations, maintenance, and/or removal. The City of Lawndale would comply with all existing energy standards and would not result in significant adverse impacts on energy resources. For the reasons stated above, buildout of the General Plan Update would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This is a less than significant impact.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: **Air Quality and Greenhouse Gas Emissions.** Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: **Regional Cooperation**. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: **Measurement and Enforcement**. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: **GHG Emissions.** Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: **Transportation Options**. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability**. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: **Sensitive Receptors.** Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: **Mitigation.** Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: **GHG Reduction.** Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: **Public Engagement**. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet EPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT)

devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NOx emissions during construction activities.

- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: **Energy Resources.** A community that safely manages its energy resources.

Policy RM-5.1: **Compliance with State Legislation.** Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: **Green Building Standards Code.** Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: **Renewable Energy.** Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: **Energy-Efficient Materials.** Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: **Energy Conservation.** Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: **Energy Needs.** Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: **Business Community.** Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: **Public Education.** Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: **Promote Energy Conservation in Existing Building Stock.** Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.6.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for energy would be similar for the region and for projects within the City.

Would the project, combined with other related cumulative projects, result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Impact Analysis: As future development projects are received and reviewed by the City in subsequent years, those projects would be reviewed for consistency with the General Plan Update and all relevant State-level programs and requirements. All future projects must implement the most current version of the Title 24 energy efficiency requirements, as required by State law. Consistency with the General Plan Update and other mandatory State-level programs would ensure that future project-level contributions to inefficient, wasteful or unnecessary energy use would be less than significant. Moreover, as identified above, buildout of the General Plan Update would not be expected to cause an inefficient, wasteful, or unnecessary use of energy resources nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As a result, the proposed General Plan Update's incremental contribution to cumulative energy impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.6.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Energy use impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable energy use impacts would occur as a result of the General Plan Update.

5.6.8 REFERENCES

Atkins, *City of Lawndale Energy Efficiency Climate Action Plan,* December 2015.

California Energy Commission, *2021 Total System Electric Generation*, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation, accessed July 12, 2023a.

California Energy Commission, *Electricity Consumption by Planning Area,* http://www.ecdms.energy.ca.gov/elecbyplan.aspx, accessed July 12, 2023b.

California Energy Commission, *2020 Total Electricity System Power,* https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2020, accessed July 12, 2023c.

California Energy Commission, *Electricity Consumption by County,* https://ecdms.energy.ca.gov/elecbycounty.aspx, accessed July 12, 2023d.

Southern California Edison, *Southern California Edison's Service Area*, https://download.newsroom.edison.com/create_memory_file/?f_id=5cc32d492cfac24d21aecf4c&content_verified=True, April 2019, accessed July 12, 2023.

U.S. Energy Information Administration, *California State Profile and Energy Estimates,* https://www.eia.gov/state/?sid=CA#tabs-1, accessed July 12, 2023a.

U.S. Energy Information Administration, *Monthly Energy Review*, https://www.eia.gov/totalenergy/data/monthly/, accessed July 12, 2023b.

U.S. Energy Information Administration, *California State Profile and Energy Estimates: Table F16: Total Petroleum Consumption Estimates, 2020,* https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures, accessed July 12, 2023c.

U.S. Energy Information Administration, *State Energy Data System: 1960-2020,* July 12, 2022.

This page intentionally left blank.

5.7 GEOLOGY AND SOILS

5.7.1 PURPOSE

This section identifies the existing geology, soils, and seismicity conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is partly based upon the Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County (Cultural Study), prepared by Duke Cultural Resources Management, LLC and dated October 2020 and updated July 2023; refer to Appendix D, *Cultural and Paleontological Resources Assessment*.

5.7.2 ENVIRONMENTAL SETTING

GEOLOGIC CONDITIONS

The City of Lawndale, including the Planning Area, is located within the Peninsular Ranges Geomorphic Province, which extends from Mount San Jacinto in the north to Baja California in the south and includes the Inland Empire, Los Angeles County, Orange County, and San Diego Counties. The Peninsular Ranges Geomorphic Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east. This geomorphic province is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Many faults to the west of the Salton Trough section of the San Andreas Fault Zone parallel this northwest-southeast trending fault zone and have taken up some of the strain of the San Andreas.

Peninsular Ranges

The Peninsular Ranges Geomorphic Province consists of a series of mountain ranges separated by long valleys, formed from faults branching from the San Andreas Fault. The topographic trend is similar to the Coast Ranges, but the geology is more like the Sierra Nevada, with granitic rocks intruding the older metamorphic rocks. The Los Angeles Basin and the Channel Islands of Santa Catalina, Santa Barbara, San Clemente, and San Nicolas are included in this province. At the northern end of the province, Mount San Jacinto forms the dramatic backdrop to the Coachella Valley more than 10,000 feet below. The Peninsular Ranges extend south across the international border into Baja California, forming the spine of Baja California.

Regional Geology

The geology of southern California formed as a result of complex plate tectonics and fault movement. The most notable fault in southern California, the San Andreas Fault, is a right lateral strike-slip (or transform) fault that marks the boundary between the Pacific tectonic plate and the North American tectonic plate. Both plates are moving northward, but the Pacific plate is moving at a faster rate than the North American plate and the relative difference in the two rates results in movement along the San Andreas Fault. Northwest of the Los Angeles basin, where the southern San Joaquin Valley meets the San Emigdio and Tehachapi Mountains, the orientation of the San Andreas Fault changes from generally

northwest to west-northwest. This portion of the fault system is known as the "Big Bend." Another large fault in southern California, the left-lateral Garlock Fault, intersects the San Andreas Fault system at this location. This bend in the San Andreas Fault system results in transpressional forces between the two tectonic plates, a geologic result of which was the uplift of the Transverse Ranges, including the San Gabriel Mountains.

The City of Lawndale is located within the northern margin of the Peninsular Ranges. The topography of Lawndale is relatively flat with an elevation of approximately 59 feet above sea level. The City is located in the southwestern portion of Los Angeles County. Los Angeles County varies greatly in topography, bounded by the Pacific Ocean to the west and high mountain ranges to the east. The topography in the County varies significantly, from beaches on the west, to mountains and then desert to the east. Much of the topography in between consists of mesas intersected by canyons.

FAULTS

Faults are classified as Historic, Holocene, Late Quaternary, Quaternary, and Pre-Quaternary according to the age of most recent movement (CGS 2002). These classifications are described as follows:

- **Historic:** faults on which surface displacement has occurred within the past 200 years;
- **Holocene:** shows evidence of fault displacement within the past 11,000 years, but without historic record;
- **Late Quaternary:** shows evidence of fault displacement within the past 700,000 years, but may be younger due to a lack of overlying deposits that enable more accurate age estimates;
- **Quaternary:** shows evidence of displacement sometime during the past 1.6 million years; and
- **Pre-Quaternary:** without recognized displacement during the past 1.6 million years.

Faults are further distinguished as active, potentially active, or inactive (CGS 2002).

- **Active:** An active fault is a Historic or Holocene fault that has had surface displacement within the last 11,000 years;
- **Potentially Active:** A potentially active fault is a pre-Holocene Quaternary fault that has evidence of surface displacement between about 1.6 million and 11,000 years ago; and
- **Inactive:** An inactive fault is a pre-Quaternary fault that does not have evidence of surface displacement within the past 1.6 million years. The probability of fault rupture is considered low; however, this classification does not mean that inactive faults cannot, or will not, rupture.

While there are no known fault zones located within City limits, the City is located between two active strike-slip faults: the Newport-Inglewood fault zone and the Palos Verdes Fault. The nearest fault zone is the Newport-Inglewood Fault, located approximately two miles northeast of the City. Figure 5.7-1, *Regional Fault Zones*, illustrates the location of nearby fault zones surrounding the Planning Area.

The most significant historically active and potentially active fault zones that are capable of seismic ground shaking and which can impact Lawndale are discussed below.

Newport-Inglewood Fault

The Newport-Inglewood Fault is considered the second most active fault in California. It runs from the City of Inglewood through Huntington Beach and out into the Pacific Ocean. This fault is capable of producing earthquakes in the range of M 6.3 to M 7.5 (magnitude of 6.3 to 7.5 on the Richter Scale). The M 6.5 1933 Long Beach earthquake occurred on the Newport-Inglewood Fault, causing 120 deaths, the collapsing of unreinforced masonry buildings, and severe damage (United States Geologic Survey 2023b).

The Newport-Inglewood Fault is located approximately 2.25 miles northeast of the Planning Area (DOC 2023b).

San Andreas Fault

The San Andreas Fault is a 400-mile-long fault running from the Mexican border to a point offshore, west of San Francisco. Geologic studies show that over the past 1,400 to 1,500 years, large earthquakes have occurred at about 130-year intervals on the southern San Andreas Fault. As the last large earthquake on the southern San Andreas occurred in 1857, that section of the fault is considered a likely location for an earthquake within the next few decades (Michael Baker 2016). There is a 59 percent chance that an earthquake of M 6.7 (magnitude of 6.7 on the Richter Scale) or larger will occur on this fault in the next 30 years (Los Angeles County 2020).

The San Andreas fault is located approximately 45 miles north of the Planning Area.

Whittier-Elsinore Fault

The Whittier-Elsinore Fault is a right-lateral strike-slip fault with some reverse slip located along the eastern edge of the Los Angeles Basin (Southern California Earthquake Data Center 2023). The Whittier-Elsinore Fault is located along the southern base of the Puente Hills. Earthquakes with surface rupture on the Whittier Fault are estimated to have probable magnitudes ranging from M 6.0 to M 7.2 (magnitude of 6.0 to 7.2 on the Richter Scale). The Whittier fault joins the Chino Fault near Prado Dam where they merge into the Elsinore Fault. At the northern end, the fault splays into several faults, creating the Whittier-Elsinore Fault Zone (USGS 2023a).

The Whittier-Elsinore Fault is located approximately 20 miles northeast of the City (Department of Conservation 2023b).

Palos Verdes Fault Zone

The Palos Verdes fault zone is located off the coast of Redondo Beach and Torrance, along the northern front of the Palos Verdes Hills, and continues southward through the Palos Verdes peninsula and offshore, outside the San Pedro Bay. The Palos Verdes Fault is capable of an earthquake of M 6.0 to M 7.0 (magnitude of 6.0 to 7.0 on the Richter Scale). The issue of concern is the fault causing shaking and liquefaction within the region (Los Angeles County 2020).

The Palos Verdes fault zone is located approximately four miles southwest of the Planning Area.

Santa Monica Fault

The Santa Monica Fault consists of two subparallel faults that trend along the southern edge of the Santa Monica Mountains. These faults extend onshore from Pacific Palisades and continue through Santa Monica and Beverly Hills to Hollywood, where they merge into a single fault strand. These subparallel faults were referred to as the "Santa Monica fault zone." The Santa Monica fault zone consists of a north-dipping blind reverse fault and a subparallel fault in the hanging wall that reaches the surface; the blind fault was named the "Santa Monica Fault." The subparallel surface fault, which is the fault associated with the noted surficial scarps and shallow groundwater barriers, named the "Potrero Canyon Fault" (California Geological Survey 2018). This fault is capable of producing an earthquake of M 6.0 to 7.0 (magnitude of 6.0 to 7.0 on the Richter Scale) (Los Angeles County 2020).

The Santa Monica Fault is located approximately 11 miles northwest of the City. The Santa Monica Fault is not considered a significant ground surface rupture hazard east of Beverly Hills, indicating that it does not pose a major threat to the Planning Area.

Charnock Fault

The Charnock Fault trends northwest-southwest, approximately parallel to the trend of the Newport-Inglewood Fault. Review of available geologic literature indicates the Charnock Fault has displaced Quaternary to Late Quaternary units; however, no offset of late Pleistocene or Holocene age alluvial deposits have been reported (Camp Dresser & McKee Inc. 2001). Because no displacement of Holocene age alluvium has occurred, the Charnock fault is considered potentially active. The potential for surface rupture associated with the Charnock Fault is considered low.

The Charnock Fault is located approximately two miles northwest of the Planning Area.

SEISMIC HAZARDS

Seismic hazards include both rupture (surface and subsurface) along active faults and ground shaking, which can occur over wider areas. Ground shaking, produced by various tectonic phenomena, is the principal source of seismic hazards in areas devoid of active faults. All areas of the State are subject to some level of seismic ground shaking.

Several scales may be used to measure the strength or magnitude of an earthquake. Magnitude scales (ML) measure the energy released by earthquakes. The Richter scale, which represents magnitude at the earthquake epicenter, is an example of an ML. As the Richter scale is logarithmic, each whole number represents a 10-fold increase in magnitude over the preceding number. Table 5.7-1, *Richter Magnitudes and Effects*, represents effects that would be commonly associated with Richter Magnitudes.

Table 5.7-1
Richter Magnitudes and Effects

Magnitude	Effects
< 3.5	Typically not felt
3.5 – 5.4	Often felt but damage is rare
5.5 – 6.0	Damage is slight for well-built buildings
6.1 – 6.9	Destructive potential over ±60 miles of occupied area
7.0 – 7.9	"Major Earthquake" with the ability to cause damage over larger areas
≥ 8	"Great Earthquake" can cause damage over several hundred miles
Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.	

Strong ground shaking from an earthquake can result in damage associated with landslides, ground lurching, structural damage, and liquefaction. Major faults in the regional area, which have caused earthquakes and those with the potential to cause earthquakes and ground shaking, include the San Andreas fault and Newport-Inglewood fault.

The Uniform California Earthquake Rupture Forecast, Version 3, or UCERF3, is the latest official earthquake rupture forecast for the State of California. It provides estimates of the likelihood and severity of potentially damaging earthquake ruptures in the long- and near-term. Combining this with ground motion models produces estimates of the severity of ground shaking that can be expected during a given period (seismic hazard), and of the threat to the built environment (seismic risk). This information is used to inform engineering design and building codes, planning for disaster, and evaluating whether earthquake insurance premiums are sufficient for the prospective losses.

UCERF3 was prepared by the Working Group on California Earthquake Probabilities (WGCEP), a collaboration between the United States Geological Survey (USGS), the California Geological Survey (CGS), and the Southern California Earthquake Center, with significant funding from the California Earthquake Authority. The UCERF3 Model represents the latest model from the WGCEP. Results for the Los Angeles region faults, which includes the Lawndale region, based on the UCERF3 are shown in Table 5.7-2, *Likelihood of Having One or More Earthquakes by Size in the Next 30 Years (Starting from 2014)*.

Table 5.7-2
Likelihood of Having One or More Earthquakes by Size in the Next 30 Years (Starting from 2014)

Magnitude (greater than or equal to)	Average repeat time (years)	30-year likelihood of one or more events	Readiness
5	1.4	100%	1.0
6	10	96%	1.0
6.7	40	60%	1.1
7	61	46%	1.2
7.5	109	31%	1.3
8	532	7%	1.3

Source: USGS, *UCERF3: A New Earthquake Forecast for California's Complex Fault System*, March 2015, https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf.

Note: Readiness indicates the factor by which probabilities are currently elevated, or lower, because of the length of time since the previous large earthquake. A factor of 1.0 indicates current earthquake likelihood relative to long-term likelihood is equal; a factor above 1.0 indicates elevated probabilities; and a factor below 1.0 indicates lower probabilities.

The USGS Earthquake Probabilities predicts the probabilities of earthquakes within Greater California, the Southern California/Los Angeles Region, and the Northern California/San Francisco Region. The USGS Earthquake Probabilities predicts the probability that an earthquake will occur in the Los Angeles region within the next 30 years is:

- 60 percent that an earthquake measuring magnitude 6.7 will occur;
- 46 percent that an earthquake measuring magnitude 7 will occur; and
- 31 percent that an earthquake measuring magnitude 7.5 will occur.

SEISMIC HAZARDS ZONES

Alquist-Priolo Fault Zone

An active earthquake fault, per California's Alquist-Priolo Act, is one that has ruptured within the Holocene Epoch (≈11,000 years). Based on this criterion, the CGS identifies Earthquake Fault Zones. These Earthquake Fault Zones are identified in Special Publication 42 (SP42), which is updated as new fault data become available. The SP42 lists all counties and cities within California that are affected by designated Earthquake Fault Zones. The Fault Zones are delineated on maps within SP42 (Earthquake Fault Zone Maps).

Southern California is a region of high seismic activity. Similar to most cities in the region, Lawndale is subject to risks associated with potentially destructive earthquakes. The Planning Area is located in the seismically active southern California region; however, there are no designated Alquist-Priolo fault zones within the Planning Area. Historically-active regional fault zones and their associated size and frequency are listed in Table 5.7-3, *Historically Active and Active Fault Zones in the Region*.

Table 5.7-3
Historically Active and Active Fault Zones in the Region

Fault	Maximum Moment Magnitude	Historical Seismicity (Last 150 years)	Slip Rate (mm/year)
San Andreas (Mojave section)	7.4	M 7.0 (1899)	30.0
Newport-Inglewood	7.1	M 6.4 (1933)	1.0
Sierra Madre (San Fernando section)	6.7	M 6.4 (1971)	2.0
Whittier-Elsinore	6.8	M 5.9 (1987)	2.5
Palos Verdes	7.3	--	3.0
San Gabriel	7.2	--	1.0
Verdugo	6.9	--	0.5
Santa Monica	6.6	--	1.0
Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.			

Although there are no fault zones within the Planning Area, regional fault zones may have an impact on the City if the rupture is of a significant magnitude. There are numerous earthquake faults within 15 miles of the City. Of the faults in the region, the most active are the Palos Verdes fault, located to the south, and the Newport-Inglewood fault, located to the northeast.

Seismic Hazard Zones

The State Seismic Hazards Mapping Act (1990) addresses hazards along active faults. The City of Lawndale is predominantly within the Inglewood Quadrangle, as delineated by CGS. However, the southern region of the City, between 171st Street and Artesia Boulevard, is within the Torrance Quadrangle. Seismic hazard zones are currently mapped within the Inglewood and Torrance quadrangles, and include areas mapped for liquefaction and landslide hazards (Department of Conservation 2023a).

LIQUEFACTION

Liquefaction, which is primarily associated with loose, saturated materials, is most common in areas of sand and silt or on reclaimed lands. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events and the ground will take on liquid properties. Thus, liquefaction requires specific soil characteristics and seismic shaking.

Liquefaction zones are areas where historical occurrence of liquefaction, or local geological, geotechnical, and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. As shown on Figure 5.7-2, *Potential Liquefaction Susceptibility*, there are no areas within the Planning Area designated as having the potential for liquefaction. There is a small pocket along the Dominguez Channel, located outside of the Planning Area (approximately 0.7 miles east of the City and 0.4 miles south of the Sphere of Influence), identified as having liquefaction potential.

Liquefaction may induce lateral spreading. Lateral spread refers to landslides that are a result of lateral displacement of gently sloping ground. Areas identified to have high liquefaction susceptibility as well as

sloping grounds are vulnerable to lateral spreading. The Planning Area is relatively flat and as discussed above, is not identified as having liquefaction potential. Therefore, the Planning Area would not be susceptible to lateral spreading.

OTHER GEOLOGIC HAZARDS

Soils

According to the Natural Resource Conservation Service (NRCS), there are five different soil types located in the Planning Area. Table 5.7-4, *Planning Area Soils*, and Figure 5.7-3, *Soil Survey*, present the soil types and associated acreages located in the Planning Area.

Table 5.7-4
Planning Area Soils

Soil Types	Total Acres
Urban land-Centinela-Typic Xerothents, fine substratum complex	1,098
Urban land- Aquic Xerorthents, fine substratum-Cropley complex	60
Urban land-Windfetch-Typical Haploxerolls complex	122
Urban land- Abaft-Marina Complex	176
Urban land-Marina Complex	118
Grand Total	**1,574***

Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.
Note: * Includes all land within the Planning Area, including non-parcelized areas. This accounts for the difference between total acres identified in this table and in Table 3-1, *Existing General Plan Land Use Designations*.

Erosion

The U.S. NRCS delineates soil units and compiles soils data as part of the National Cooperative Soil Survey. The following description of erosion factors is provided by the NRCS Physical Properties Descriptions:

- Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Erosion factor Kw indicates the erodibility of the whole soil, whereas Kf indicates the erodibility of the fine soils. The estimates are modified by the presence of rock fragments.

Soil erosion data for the City of Lawndale was obtained from the NRCS in 2022 (United States Department of Agriculture, Natural Resources Conservation Service 2022). As identified by the NRCS web soil survey, the erosion factor K within the Planning Area varies from 0.02 to 0.55, which is considered a low to high potential for erosion. Generally, erosion potential within the Planning Area increases to the south.

Expansive Soils

The NRCS provides a description of linear extensibility (also known as shrink-swell potential or expansive potential). The shrink-swell potential is low if the soil has a linear extensibility of less than three percent; moderate if three to six percent; high if six to nine percent; and very high if more than nine percent. If the linear extensibility is more than three, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots; special design is commonly needed.

The linear extensibility of the soils within Lawndale ranges from 'Low' to 'Low to High.' Figure 5.7-4, *Shrink-Swell Potential of Soils*, illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning Area has 'Low to Medium' expansive soils. The areas with 'Low to High' expansive soils are in proximity to Dominguez Channel, within the Sphere of Influence (SOI).

Landslides

CGS classifies landslides based on the type of material that failed and the type of movement that the failed material exhibited. Material types are broadly categorized as either rock or soil, or a combination of the two for complex movements. Landslide movements are categorized as falls, topples, spreads, slides, or flows.

Landslide potential is influenced by physical factors, such as slope, soil, vegetation, and precipitation. Landslides require a slope, and can occur naturally from seismic activity, excessive saturation, and wildfires, or from human-made conditions such as construction disturbance, vegetation removal, wildfires, etc. Figure 5.7-5, *Landslide Susceptibility*, illustrates the landslide potential (for non-seismically induced potential) in the vicinity of the Planning Area. The highest levels of susceptibility are located adjacent to Dominguez Channel within the SOI and some areas of the City adjacent to the I-405 freeway.

Earthquake Induced Landslides

Earthquake-Induced Landslide Zones are areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required. The California Seismic Hazard Mapping Program delineates the approximate boundaries of areas susceptible to earthquake-induced landslides and other slope failures (e.g., rockfalls). According to the Seismic Hazard Mapping Program, Lawndale does not have areas susceptible to earthquake-induced landslides and other slope failures (Department of Conservation 2023a).

Subsidence

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. In California, large areas of land subsidence were first documented by USGS scientists in the first half of the 20th century. Most of this subsidence was a result of excessive groundwater pumping. Completion of California's State and Federal water projects that bring water from California's wet north to its dry south allowed some groundwater aquifers to recover, and subsidence decreased in these areas. There is no record of historic or current USGS-recorded subsidence within the Planning Area.

Collapsible Soils

Hydroconsolidation occurs when soil layers collapse, or settle, as water is added under loads. Natural deposits susceptible to hydroconsolidation are typically aeolian, alluvial, or colluvial materials, that have a high apparent strength when dry. The dry strength of the materials may be attributed to the clay and silt constituents in the soil and the presence of cementing agents (i.e., salts). Capillary tension may tend to bond soil grains. Once these soils are subjected to excessive moisture and foundation loads, the constituency including soluble salts or bonding agents is weakened or dissolved, capillary tensions are reduced and collapse occurs resulting in settlement. Existing alluvium within the Planning Area may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

PALEONTOLOGICAL RESOURCES

The geologic units underlying the City of Lawndale record coastal and inland deposition during the Pleistocene Epoch (2.5 million years ago to 11,700 years ago). The Planning Area is broadly located within the Southern California/Northern Baja Coast region and it is composed of coastal and alluvial plains, marine terraces, and low hills. As part of the Cultural Resource Assessment, a paleontological records search was requested from the Natural History Museum of Los Angeles County (LACM). Table 5.7-5, *Geologic Units and Their Paleontological Potential,* shows the level of sensitivity of the underlying geologic units for paleontological resources. The City of Lawndale is underlain by two geologic units: Old alluvium and Old eolian deposits.

Table 5.7-5
Geologic Units and Their Paleontological Potential

Age	Geologic Unit	Fossils Present	Paleontological Sensitivity
Pleistocene	Old alluvium (Qoa)	Whale, horse, Columbian mammoth	High at surface and at depth
	Old eolian deposits (Qoe)		
Source: Duke Cultural Resources Management, *Cultural Resource Assessment*, 2023.			

Old, alluvium, undivided (Qoa)

Old alluvium underlies the majority of the City of Lawndale, including the Planning Area. It is composed of moderately well-consolidated, poorly sorted, permeable, slightly dissected gravel, sand, silt, and clay. These sediments were deposited on canyon floors by fluvial activity in the late to middle Pleistocene Epoch.

Old eolian deposits (Qoe)

Old eolian deposits underlie the northwest and southwest corners of the City of Lawndale. It is composed of poorly consolidated, dense to very dense, well-sorted, fine- to coarse-grained sand and silty sand. These sediments were deposited as eolian coastal dunes in the late to middle Pleistocene but the dune formation processes are now inactive.

Deposits from the Pleistocene Epoch have not produced any fossil localities within the Planning Area, but have produced two fossil localities within three miles:

- The "Mobile Oil Refinery" locality produced cetacean (whale) and Equus (horse) material from two miles southeast of the Planning Area and;
- Locality LACM 2035 produced Mammuthus columbi (Columbian mammoth) on 139th Street, one mile north of the Planning Area.

Due to fossil material being previously discovered in deposits from the Pleistocene Epoch in the vicinity of the Planning Area, both old alluvium and old eolian deposits have a high paleontological sensitivity at the surface and at depth.

5.7.3 REGULATORY SETTING

FEDERAL

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP). Under the NEHRP, four Federal agencies have responsibility for long-term earthquake risk reduction: the USGS, the National Science Foundation, the Federal Emergency Management Agency (FEMA), and the National Institute of Standards and Technology. NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerability; improvements of building codes and land use practices; risk reduction through post-earthquake investigation and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results.

STATE

Earthquake Fault Zoning Act (Alquist-Priolo Act)

The State of California Alquist-Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the State geologist has established regulatory zones (known as earthquake fault zones) around surface traces of active faults. Application for a development permit for any project within a delineated earthquake fault zone is required to be accompanied by a geologic report, prepared by a geologist registered in the State of California, that is directed to the problem of potential surface fault displacement through a project site.

Seismic Hazards Mapping Act

The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, ground amplification, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The CGS is the primary agency responsible for the implementation of the SHMA. The CGS prepares maps identifying seismic hazard zones and provides them to local governments, which include areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within these zones

following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

California Building Standards Code (Title 24)

Title 24 of the California Code of Regulations (CCR) provides state regulations that govern the design and construction of buildings, associated facilities, and equipment. These regulations are also known as building standards (reference California Health and Safety Code Section 18909). Cities and counties are required by state law to enforce CCR Title 24, and may adopt ordinances making more restrictive requirements than provided by CCR Title 24 due to local climatic, geological, or topographical conditions.

Caltrans Seismic Design Criteria

The California Department of Transportation (Caltrans) has Seismic Design Criteria (SDC), which is an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. The SDC adopts a performance-based approach specifying minimum levels of structural system performance, component performance, analysis, and design practices for ordinary standard bridges. The SDC has been developed with input from the Caltrans Offices of Structure Design, Earthquake Engineering and Design Support, and Materials and Foundations. Memo 20-1 Seismic Design Methodology (Caltrans 1999) outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components, and seismic design practices that collectively make up Caltrans' seismic design.

LOCAL

County of Los Angeles 2020 All-Hazards Mitigation Plan

The Los Angeles County 2020 All-Hazards Mitigation Plan (AHMP) assesses risks posed by natural hazards and identifies a mitigation action plan for reducing the risks in Los Angeles County. The primary focus of the 2020 AHMP is preparation for natural hazards and secondary hazards that follow as a result of a natural hazard. In addition, potential climate change impacts are addressed in the plan as increasing surface temperatures will likely result in more droughts and subsequently the risk of wildfires. Therefore, climate change, dam failure, drought, earthquake, flood, landslide, tsunami, and wildfire are the main focuses in the 2020 AHMP.

City of Lawndale Local Hazard Mitigation Plan 2016

The City of Lawndale developed the 2016 Local Hazard Mitigation Plan (LHMP) in an effort to reduce future loss of life and property resulting from natural disasters and to provide increased resiliency for the City, allowing Lawndale to return to "the norm" sooner, with fewer impacts to people and infrastructure. The purpose of the Lawndale LHMP is to provide the City with a blueprint for hazard mitigation action planning. The plan identifies resources, information, and strategies for risk reduction, and provides a tool to measure the success of mitigation implementation on a continual basis.

City of Lawndale Municipal Code

Title 13, Public Services, includes Chapter 13.12, *Storm water and urban runoff pollution control*, and Chapter 13.16, *Standard urban stormwater mitigation plan and low impact development implementation*. Chapter 13.12 defines the illicit discharges and connections prohibited; controls pollutants from industrial sites; provides required best management practices (BMPs); regulates construction activity in regards to stormwater measures; and establishes fees for the services provided. Chapter 13.16 establishes the City's standard urban stormwater mitigation program (SUSMP) conditions and stormwater management program. The SUSMP is a compliance component under the municipal National Pollutant Discharge Elimination System (NPDES) permit. New development and redevelopment projects are required to comply with SUSMP conditions assigned by the City that consist of: (1) low impact development (LID) structural and non-structural best management practices (BMPs); (2) source control BMPs; and (3) structural and non-structural BMPs for specific types of uses. The City's stormwater management program/watershed management program is also incorporated into Chapter 13.16 and contains specific conditions and procedures for meeting planning and land development program and SUSMP requirements.

Lawndale Municipal Code, Chapter 15.04, *Building code*, adopts the 2022 California Building Code as amended by Title 26, Los Angeles County Building Code, as the City's building code, which regulates the erection, construction, enlargements, alteration, repair, moving, removal, conversion, demolition, occupancy, use, equipment, height, area, security, abatement, and maintenance of certain residential buildings or structures within the City. To protect lives and infrastructure in the City, the Building & Safety Division is responsible for compliance with building and zoning codes that mitigate geologic hazards and the Municipal Services Department is responsible for code enforcement.

Title 17, *Zoning*, Section 17.88.080, *Soils report*, requires a soils report where irrigated landscaped areas exceed ten thousand square feet or where difficult soil or landscaping conditions exist at the project site. The soils report shall describe the depth, composition, fertility, and landscaping suitability of the soil at the project site, and shall include recommendations for soil amendment, fertilizer, and other items as needed.

5.7.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to geology and soils. The issue presented in the Initial Study Environmental Checklist have been utilized as thresholds of significant in this section. Accordingly, a project may create a significant environmental impact if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving;
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42 (refer to Impact Statement GS-1);
    - Strong seismic ground shaking (refer to Impact Statement GS-1);

  - Seismic-related ground failure, including liquefaction (refer to Impact Statement GS-1); and
  - Landslides (refer to Impact Statement GS-1).
- Result in substantial soil erosion or the loss of topsoil (refer to Impact Statement GS-2);
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse (refer to Impact Statement GS-3);
- Be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property (refer to Impact Statement GS-4);
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water (refer to Impact Statement GS-5); and/or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (refer to Impact Statement GS-6).

5.7.5 IMPACTS AND MITIGATION MEASURES

GS-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides?

Impact Analysis: The Planning Area, like the rest of southern California, is situated within a seismically active region as the result of being located near the active margin between the North American and Pacific tectonic plates. Development associated with the General Plan Update could expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

As discussed in Section 5.7.2, *Environmental Setting*, there are no designated Alquist-Priolo fault zones within the Planning Area. While there are no major active faults within the Planning Area, major active and potentially active faults exist in the vicinity of the Planning Area as shown in Figure 5.7-1, including the Newport-Inglewood Fault, San Andreas Fault, and Palos Verdes Fault. Therefore, the Planning Area could experience considerable ground shaking generated by faults located near the City.

As shown in Figure 5.7-2, there are no areas within the Planning Area designated by the CGS as having the potential for liquefaction. Further, the City's LHMP does not identify the Planning Area as being located within an area that is susceptible to liquefaction. Additionally, as discussed above, there are no earthquake-induced landslide seismic hazard zones mapped within the Planning Area.

Future development projects would be required to comply with the provisions of the California Building Standards Code (CBSC), which requires development projects to perform geotechnical investigations in accordance with State law, engineer improvements to address potential seismic and ground failure issues, and use earthquake-resistant construction techniques to address potential earthquake loads

when constructing buildings and improvements. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code, and other regulations. In addition to the requirements associated with the CBSC and the Municipal Code, the General Plan Update Public Safety Element includes goals, policies and actions to address potential impacts associated with seismic activity. Policy PS-2.1 requires that geotechnical hazard data is incorporated into in future land use decision-making, site design, and construction standards. Policy PS-2.2 requires the enforcement of State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 ensures that mitigation measures are monitored and enforced to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Policy PS-2.4 encourages the City to educate the community to mitigate potential injury and damage associated with earthquakes. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Action PS-2c ensures adoption and implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e requires feasible mitigation measures for development projects to reduce the risk to the community from hazards related to geologic conditions and seismic activity.

Future development projects associated with implementation of the General Plan Update would be reviewed to identify and assess seismic safety issues and would be required to design and construct improvements in compliance with the applicable building codes and standards in place at the time to reduce the potential adverse effects associate with strong seismic ground shaking. With the implementation of the policies and actions in the General Plan, as well as applicable State and City codes, potential impacts associated with strong seismic ground shaking would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Geologic and Seismic Hazards.** A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: **Geologic Hazard Identification.** Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: **Earthquake Protection.** Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: **Development Projects.** Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Policy PS-2.4: **Seismic Hazard Education.** Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

GS-2: Result in substantial soil erosion or the loss of topsoil?

Impact Analysis: Implementation of the General Plan Update would provide for development and improvement projects that would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. As noted previously, soil erosion data for the Planning Area was obtained from the NRCS. As identified by the NRCS web soil survey, the erosion factor K within the Planning Area varies widely. The NRCS identifies an erosion factor K within the Planning Area of 0.02 to 0.55, which is considered a low to high potential for erosion. Depending upon the location of the specific project site, construction activities, and soil conditions, construction-related erosion could result in the loss of a substantial amount of nonrenewable topsoil and could adversely affect water quality in nearby surface waters. Similarly, precipitation and irrigation of landscaping may result in runoff during project operations, which could result in the loss of nonrenewable topsoil and potentially affect water quality. However, the Planning

Area is primarily urbanized with limited pervious areas; new development would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Due to the limited pervious areas that occur within the City, it is not anticipated that Project implementation would increase impervious areas resulting in increased runoff when compared to existing conditions.

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code, and other relevant regulations. In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a stormwater pollution prevention and monitoring plan (SWPPP), which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. The SWPPP would include project specific best management measures that are designed to control drainage and erosion.

The General Plan Update includes a range of policies and actions related to best management practices, NPDES requirements, and minimizing discharge of materials (including eroded soils) into the storm drain system. Proposed Resource Management Element Policy RM-6-2 encourages all landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6a requires new development and redevelopment projects to implement BMPs to reduce soil erosion and pollutants in urban runoff. Proposed Public Safety Element Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. With the implementation of the policies and actions in the General Plan Update, as well as applicable State and City requirements, potential impacts associated with erosion and loss of topsoil would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Policy PS-5.4: **Best Management Practices.** Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.6: **Local Storm Drainage Infrastructure.** Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

GS-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Impact Analysis: Future development anticipated by the General Plan Update could result in the exposure of people and structures to conditions that have the potential for adverse effects associated with ground instability or failure. Refer to Impact Statement GS-1 for potential impacts related to liquefaction. The following discussion identifies the potential for landslides, lateral spreading, or collapse within the Planning Area:

Landslide

Figure 5.7-5 illustrates the landslide potential (for non-seismically induced potential) in the vicinity of the Planning Area. Due to the Planning Area's relatively flat topography, the majority of the Planning

Area has low susceptibility to landsliding, with increasing susceptibility associated with manufactured slopes near the I-405 and the Dominguez Channel.

Lateral Spreading

Lateral spreading refers to landslides that are a result of lateral displacement of gently sloping ground. Areas identified to have high liquefaction susceptibility as well as sloping grounds are vulnerable to lateral spreading. The Planning Area is relatively flat and as discussed above, is not identified as having liquefaction potential. Therefore, the Planning Area would not be susceptible to lateral spreading.

Subsidence

Soils with high shrink-swell potential can be particularly susceptible to subsidence during a loss of soil moisture. The Planning Area and surrounding area contain soils that range from having low shrink-swell potential to very high shrink-swell potential. The City of Lawndale does not have any historic or current USGS-recorded subsidence.

Collapse

Collapsible soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. Collapsible soils occur predominantly at the base of mountain ranges, where Holocene-age alluvial fan and wash sediments have been deposited during rapid run-off events. Differential settlement of structures typically occurs when heavily irrigated landscape areas are near a building foundation. Examples of common problems associated with collapsible soils include tilting floors, cracking or separation in structures, sagging floors, and nonfunctional windows and doors. Existing alluvium within the Planning Area may be susceptible to collapse and excessive settlements, which could create the risk of hydroconsolidation if these soils were exposed to excessive moisture.

Conclusion

As discussed above, the Planning Area is not susceptible to lateral spreading, subsidence, or liquefaction. The potential for landslide within the Planning Area is low.

The General Plan Update includes policies and actions to address geologic conditions within the Planning Area. Public Safety Element Policy PS-2.1 requires that geotechnical hazard data be incorporated in future land use decision-making, site design, and construction standards. Policy PS-2.2 enforces State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 requires mitigation measures be monitored and enforced to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Policy PS-2.4 encourages the City to educate the community to mitigate potential injury and damage associated with earthquakes. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind. Action PS-2c ensures adoption and

implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e requires feasible mitigation on development projects to reduce the risk to the community from hazards related to geologic conditions and seismic activity.

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the CBSC, the General Plan Update policies and actions, Lawndale Municipal Code, and other regulations. Subsequent development and infrastructure projects requiring discretionary review would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Future development and improvement projects would be required to prepare site-specific geotechnical studies to identify geologic and soil conditions specific to the site and provide design recommendations consistent with the requirements of State and City codes. Implementation of CBSC and the Municipal Code requirements related to seismic and geologic conditions and the General Plan Update policies and actions would ensure that future development projects are evaluated for potential geologic and seismic risks and that potential risks are adequately addressed. With the implementation of the policies and actions in the General Plan Update, as well as applicable State and City codes, potential impacts associated with unstable geologic conditions would be reduced to less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Geologic and Seismic Hazards.** A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: **Geologic Hazard Identification.** Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: **Earthquake Protection.** Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: **Development Projects.** Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Policy PS-2.4: **Seismic Hazard Education.** Continue to seek out opportunities to educate and encourage the community on ways to implement measures to mitigate potential injury and damage associated with earthquakes.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

GS-4: Be located on expansive soil, as defined in Tables 18-1-D of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: Expansive soil properties can cause substantial damage to building foundations, piles, pavements, underground utilities, and/or other improvements. Structural damage, such as warping and cracking of improvements, and rupture of underground utility lines, may occur if the expansive potential of soils is not considered during the design and construction of all improvements.

Figure 5.7-4 illustrates the shrink-swell potential of soils in the Planning Area. The majority of the Planning Area has 'Low to Medium' expansive soils. The areas with 'Low to High' expansive soils are in proximity to Dominguez Channel, within the SOI.

The proposed Public Safety Element of the General Plan Update includes policies and actions that are designed to protect the City from geologic hazards, including expansive soils. Policy PS-2.1 incorporates geotechnical hazard data in future land use decision-making, site design, and construction standards. Policy PS-2.2 enforces State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities. Policy PS-2.3 monitors and enforces mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibits development in areas where seismic and geologic hazards cannot be mitigated. Action PS-2a directs the City to review and update the City's geologic and seismic hazards maps at least annually. Action PS-2b ensures development proposals are reviewed to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by

natural forces such as earthquakes and wind. Action PS-2c ensures adoption and implementation of the latest version of the building codes adopted by the State. Action PS-2d requires surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers during review of discretionary development and redevelopment proposals, where appropriate. When potential geologic impacts are identified, project applicants are required to mitigate the impacts per the recommendations contained within the geologic survey. Action PS-2e reduces the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects.

As stated, future development and infrastructure projects considered by the City, would be evaluated for conformance with the CBSC, the General Plan Update policies and actions, Lawndale Municipal Code, and other regulations. Subsequent development and infrastructure projects requiring discretionary review would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Future development and improvement projects would be required to prepare site-specific geotechnical studies to identify geologic and soil conditions specific to the site, including the potential for expansive soils. A site-specific geotechnical investigation would identify the potential for damage related to expansive soils and non-uniformly compacted fill and engineered fill. If a risk is identified, design criteria and specification options may include removal of the problematic soils, and replacement, as needed, with properly conditioned and compacted fill material that is designed to withstand the forces exerted during the expected shrink-swell cycles and settlements. Design criteria and specifications set forth in the design-level geotechnical investigation would ensure impacts from problematic soils are minimized. Thus, implementation of CBSC and the Municipal Code requirements related to on-site soil conditions and the General Plan Update policies and actions would ensure that future development projects are evaluated for potential risks associated with development on expansive soils, and that potential risks are adequately addressed. Therefore, this impact is considered less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-2: **Geologic and Seismic Hazards.** A community protected from loss of life or injury and damage to property due to geologic and seismic hazards.

Policy PS-2.1: **Geologic Hazard Identification.** Continue to incorporate geotechnical hazard data in future land use decision-making, site design, and construction standards.

Policy PS-2.2: **Earthquake Protection.** Enforce State seismic design guidelines and all relevant building codes to reduce the risk of damage associated with seismic activity, with a special focus on creating resilient critical infrastructure and facilities.

Policy PS-2.3: **Development Projects.** Monitor and enforce mitigation measures to reduce risks for projects where seismic and geologic hazards can be mitigated and prohibit development in areas where seismic and geologic hazards cannot be mitigated.

Action PS-2a: Review and update (at least annually) the City's geologic and seismic hazards maps in concert with updates from the California Geologic Survey and local surveys.

Action PS-2b: Review development proposals to confirm compliance with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces such as earthquakes and wind.

Action PS-2c: Adopt the latest version of the building codes adopted by the State of California and ensure implementation in all new construction and renovations.

Action PS-2d: During review of discretionary development and redevelopment proposals, require surveys of soil and geologic conditions by State licensed Engineering Geologists and Civil Engineers where appropriate. When potential geologic impacts are identified, require project applicants to mitigate the impacts per the recommendations contained within the geologic survey.

Action PS-2e: Reduce the risk to the community from hazards related to geologic conditions and seismic activity by requiring feasible mitigation of such impacts on development projects. Assess development proposals for potential hazards pursuant to the California Environmental Quality Act. Require measures to mitigate all identified significant public safety hazards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

GS-5: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Impact Analysis: As described in Section 5.19, *Utilities and Service Systems*, wastewater service is provided to the Planning Area by the City and the Los Angeles County Sanitation Districts (LACSD). Local wastewater produced in the City connects to sewer mains maintained by the LACSD. LACSD owns, operates, and maintains sewer lines that form the backbone of the regional wastewater conveyance system. Future development within the Planning Area would be required to connect to the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. As such, no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions: There are no General Plan Update goals, policies, or actions specific to septic tanks or alternative waste water disposal systems.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

GS-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: The City of Lawndale is underlain by two geologic units: Old alluvium and Old eolian deposits. These two geologic units are considered to have a high paleontological sensitivity at surface and at depth. Although fossil localities have not been recorded within the Planning Area, deposits from the Pleistocene Epoch have produced two fossil localities within three miles of the Planning Area. Therefore, it is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities. This is considered a potentially significant impact.

The paleontological resources research indicates that the geologic formations in the City are known to contain paleontological localities with rare, well-preserved fossil materials that offer important information about the plant or animal and/or its evolutionary history. Both formations have been determined to be highly sensitive for paleontological resources. These important resources are most often destroyed as a result of construction, such as excavation, trenching, and tunneling.

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply (Scott 2003):

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct.
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein.
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas.
4. The fossils demonstrate unusual or spectacular circumstances in the history of life.
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.
6. All identifiable vertebrate fossils are considered significant due to the rarity of their preservation.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and invertebrate animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important.

Damage to or destruction of a paleontological resource would be considered a potentially significant impact under local, State, or Federal criteria. The proposed General Plan Update Resource Management Element includes policies and actions to protect significant paleontological resources within the Planning Area. Policy RM-3.1 requires the protection areas containing paleontological resources. Action RM-3a requires the City assess development proposals for potential impacts to sensitive historic,

archaeological, and paleontological resources pursuant to CEQA. Action RM-3f requires an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to CEQA. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

With implementation of the General Plan Update policies and actions, potential impacts to paleontological resources associated with future development anticipated by the General Plan Update would be reduced to less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: **Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3f: The City shall require an assessment of the potential for development proposals to significantly impact paleontological resources pursuant to the California Environmental Quality Act Guidelines. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.7.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to geology and soils may occur. The cumulative projects' regional geologic setting and regional seismicity would be similar; however, the local geologic setting, surficial geology, and subsurface soil conditions would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Impact Analysis: There are no designated Alquist-Priolo fault zones within the Planning Area. Future development and cumulative development would be required to comply with CBSC, and each project within the City would be evaluated for conformance with the CBSC, General Plan, Lawndale Municipal Code, and other regulations. Therefore, the proposed Project would not contribute to cumulative impacts related to potential adverse effects involving rupture of a known earthquake fault and impacts in this regard are not cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction?

Impact Analysis: The Project proposes a comprehensive update to the City's General Plan, including a revised Land Use Map. Buildout associated with the General Plan Update Land Use Map would allow for new or increased residential and non-residential development within specific areas of the City when compared to existing conditions, potentially exposing people to strong seismic ground shaking or seismic-related ground failure. The Planning Area is not located within a mapped liquefaction zone, as delineated by the CGS. Future development and cumulative development would generally experience similar ground shaking associated with seismic activity.

Future development within the Planning Area and cumulative projects would be required to conduct a site-specific geotechnical study to determine the geotechnical feasibility of the specific development being proposed at that time. Any recommendations presented in the geotechnical study would be required to be incorporated into the design and construction of the future development. The geotechnical study would include specific recommendations based on seismic design parameters for foundation design, retaining and screening walls, exterior flatwork, concrete mix design, corrosion, pavement design, and general earthwork and grading, among other factors.

Future development and cumulative development would be required to comply with all applicable regulations in the most recent CBSC, which includes design requirements to mitigate the effects of potential hazards associated with seismic ground shaking and liquefaction. The Lawndale Building and Safety Services Division would review construction plans for compliance with the CBSC and Lawndale

Municipal Code, as well as the geotechnical study's recommendations. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to geologic hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on geologic hazards to a less-than-significant level. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving strong seismic ground shaking or seismic-related ground failure, including liquefaction would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects result in substantial soil erosion or the loss of topsoil?

Impact Analysis: Future development sites and cumulative development sites within the City and surrounding areas may contain soils that have erosion potential. Implementation of the construction activities associated with Project implementation and cumulative development projects would involve some land clearing, mass grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. Similarly, precipitation and irrigation of landscaping may result in runoff during project operations, which could result in the loss of nonrenewable topsoil and potentially affect water quality. However, the Planning Area is primarily urbanized with limited pervious areas; new development would primarily occur through infill development and redevelopment of sites that are currently developed and do not contain significant amounts of pervious area. Due to the limited pervious areas that occur within the Planning Area, it is not anticipated that Project implementation would increase impervious areas resulting in increased runoff when compared to existing conditions.

Site specific geology and soil conditions would be evaluated on a project-by-project basis. However, all future residential development associated with the proposed Project and cumulative projects within the region would be required to comply with stormwater runoff and pollution control requirements required by the regional water quality control board and implemented by the specific jurisdiction in which the development occurs. Construction activities within the City would be required to comply with the Lawndale Municipal Code which implements erosion and siltation control measures of the Construction General Permit, reducing potential impacts associated with soil erosion or the loss of topsoil during construction activities. Additionally, future development and cumulative development would be required to comply with postconstruction runoff pollution reduction BMPs implemented through the SUSMP. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to stormwater runoff and other causes of soil erosion. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the

General Plan Update on soil erosion and loss of topsoil to a less-than-significant level. Thus, the Project's incremental effects involving substantial soil erosion or the loss of top soil would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact Analysis: Due to the generally flat topography within the City and surrounding area, the potential for lateral spreading within the Planning Area is considered to be low. Further, the Planning Area is not identified as having the potential for subsidence. Soils exposed to excessive moisture within the Planning Area could be at risk of hydroconsolidation and soils with layers of expansive clay could result in structural damage associated with expansive soils. The geotechnical and soil characteristics of future development associated with the Project and any cumulative development within the City would be evaluated on a project-by-project basis and appropriate mitigation measures would be required to reduce potential impacts associated with unstable geologic units or soils.

Future development associated with implementation of the proposed Project would be required to prepare a geotechnical study for the specific site being proposed for development. The Lawndale Building and Safety Services Division would review construction plans for compliance with the CBSC and City Municipal Code, as well as the geotechnical study's recommendations. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to geologic hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on geologic hazards to a less-than-significant level. Therefore, the Project's incremental effects involving unstable geologic units or soils would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

As discussed above, future development within the Planning Area would be required to connect to the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. As such, no impact would occur. Therefore, the Project's incremental effects involving soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no General Plan Update goals, policies, or actions specific to septic tanks or alternative waste water disposal systems.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis: The Planning Area has the potential to contain paleontological resources. As discussed above, compliance with the City's Municipal Code and implementation of General Plan Update policies and actions would reduce potential impacts to paleontological resources associated with future construction activities in the Planning Area to a less than significant level. There is also the potential for cumulative project sites within the region to have soils that contain paleontological resources. Construction activities associated with the cumulative projects have the potential to directly or indirectly destroy paleontological resources specific to those development sites. However, these potential impacts are site-specific and generally do not result in cumulative effects. Additionally, individual projects would undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to paleontological resources. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to paleontological resources. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on paleontological resources to a less than significant level. Therefore, the Project's incremental effects involving paleontological resources would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.7.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Geology and soils impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable geology and soils impacts would occur as a result of the General Plan Update.

5.7.8 REFERENCES

California Geological Survey (CGS), *California Geomorphic Provinces, California Geological Survey Note 36,* 2002.

California Geologic Survey (CGS), *Fault Evaluation Report FER 259: The Hollywood, Santa Monica and Newport-Inglewood Fault in the Beverly Hills and Topanga 7.5 Quadrangle*, January 5, 2018.

Camp Dresser & McKee Inc., *Earth/Geology Technical Report LAX Master Plan EIS/EIR*, January 2001.

Department of Conservation (DOC), *CGS Information Warehouse: Regulatory Maps*, https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps accessed March 8, 2023a.

Department of Conservation (DOC), *DOC Maps: Geologic Hazards*, https://maps.conservation.ca.gov/geologichazards/ accessed March 8, 2023b.

De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, June 2023.

Duke Cultural Resources Management, LLC, *Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County*, October 2020, updated July 2023.

Los Angeles County, *County of Los Angeles 2020 All-Hazards Mitigation Plan*, 2020.

Michael Baker International, *Local Hazard Mitigation Plan, City of Lawndale*, March 2016.

Scott, E. & Springer, K., *CEQA and fossil preservation in southern California, The Environmental Monitor*, 2003.

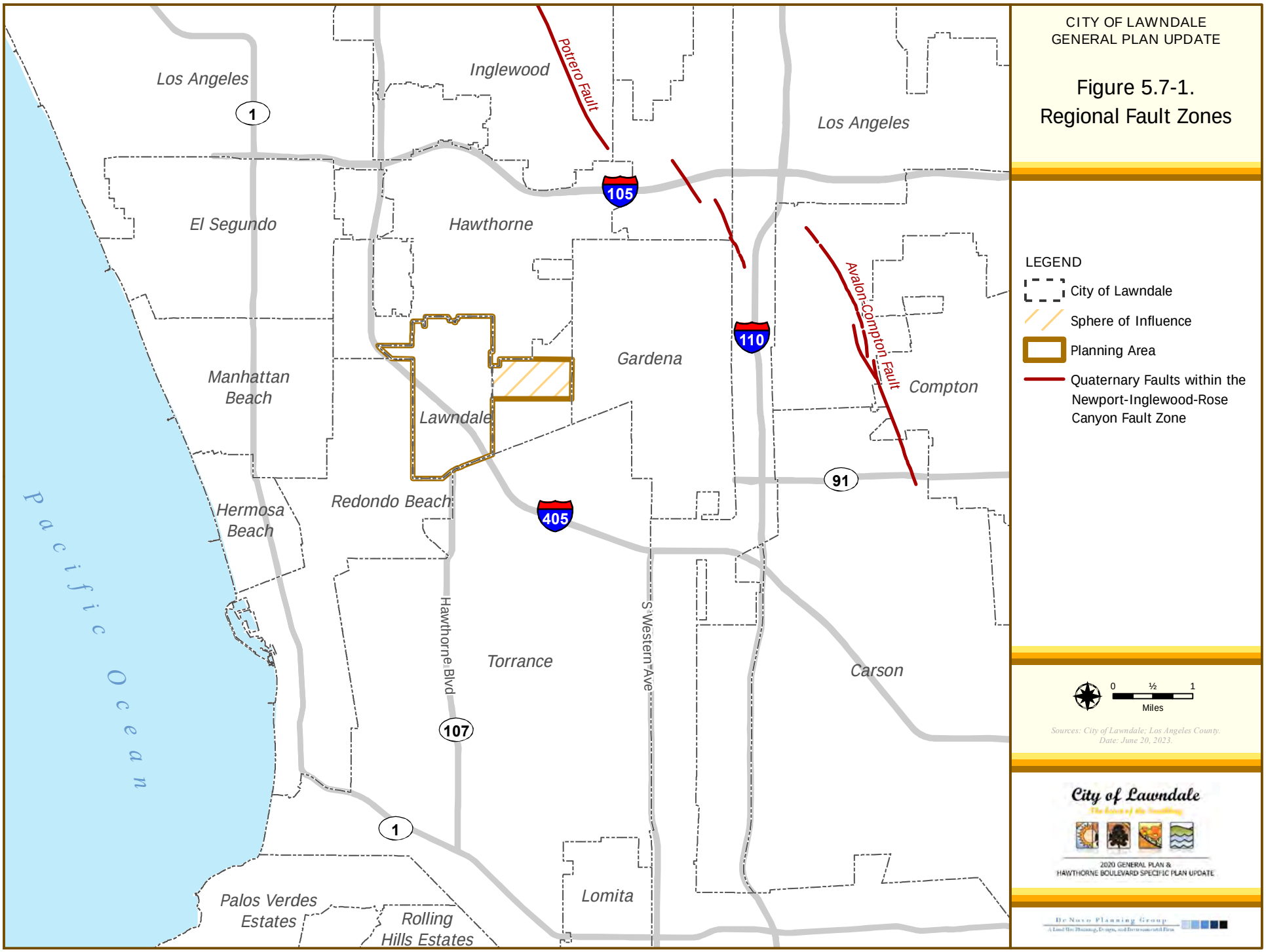
Southern California Earthquake Data Center (SCEDC), *Earthquake Information, Fault Name Index: Whittier Fault,* https://scedc.caltech.edu/earthquake/whittier.html, accessed March 8, 2023.

United States Geologic Survey (USGS), *Quaternary Fault and Fold Database of the United States: Elsinore fault zone, Chino section (Class A) No. 126b*, https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=126&section_id=b accessed March 8, 2023a.

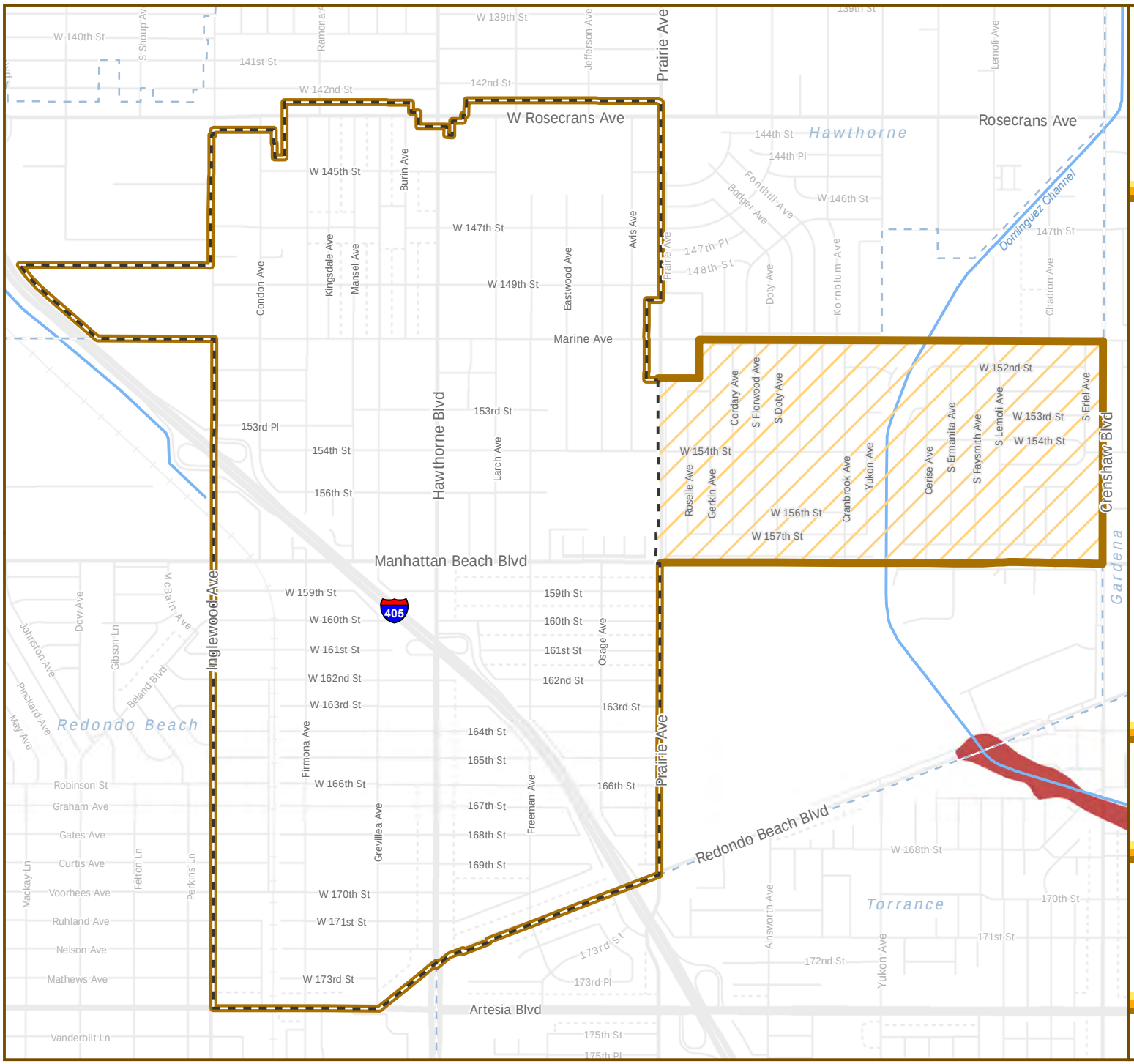
United States Geologic Survey (USGS), *Quaternary Fault and Fold Database of the United States: Newport-Inglewood-Rose Canyon fault zone, south Los Angeles Basin section (Class A) No. 127b,* https://earthquake.usgs.gov/cfusion/qfault/show_report_AB_archive.cfm?fault_id=127&section_id=b, accessed March 8, 2023b.

United States Department of Agriculture, Natural Resources Conservation Service (NRCS), *Web Soil Survey*, February 2022.

This page intentionally left blank.


CITY OF LAWNDALE
GENERAL PLAN UPDATE
Figure 5.7-1.
Regional Fault Zones
LEGEND
City of Lawndale
Sphere of Influence
Planning Area
Quaternary Faults within the Newport-Inglewood-Rose Canyon Fault Zone
Los Angeles
Inglewood
Potrero Fault
Los Angeles
El Segundo
Hawthorne
Avalon-Compton Fault
Manhattan Beach
Gardena
Compton
Lawndale
Hermosa Beach
Redondo Beach
Pacific Ocean
Hawthorne Blvd
S Western Ave
Torrance
Carson
Lomita
Palos Verdes Estates
Rolling Hills Estates
1
105
110
91
405
107
0
½
1
Miles
Sources: City of Lawndale; Los Angeles County.
Date: June 20, 2023.
City of Lawndale
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE
DeNovo Planning Group

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.7-2. Potential Liquefaction Susceptibility

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Potential Liquefaction Area

0 500 1,000
Feet

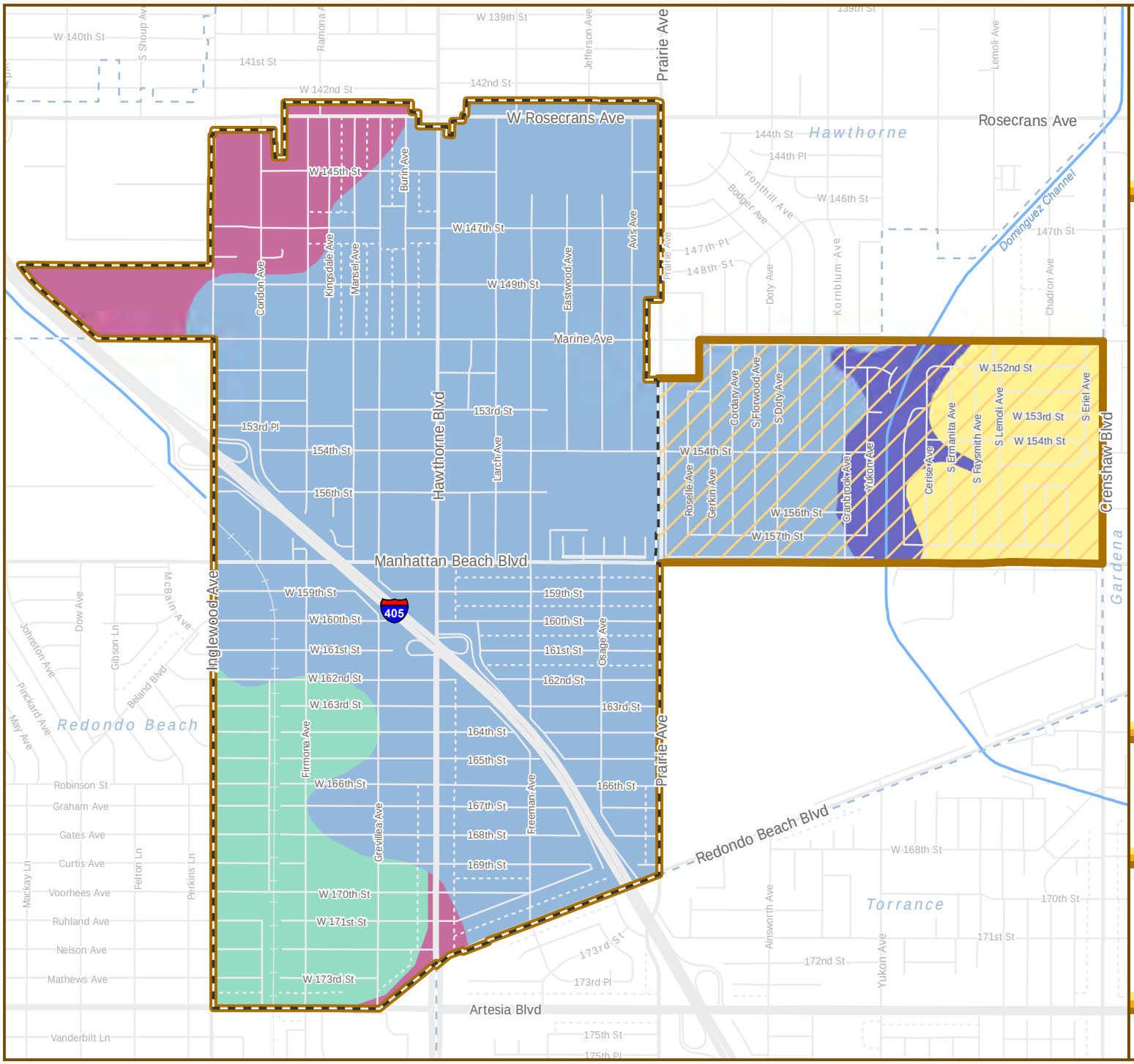
Sources: City of Lawndale; Los Angeles County.
Date: June 20, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.7-3. Soil Survey

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

NRCS Soil Description

- Urban land-Centinela-Typic Xerorthents, fine substratum complex (±1,098 acres)
- Urban land-Aquic Xerorthents, fine substratum-Cropley complex (±60 acres)
- Urban land-Windfetch-Typical Haploxerolls complex (±122 acres)
- Urban land-Abaft-Marina complex (±176 acres)
- Urban land-Marina complex (±118 acres)

0 500 1,000
Feet

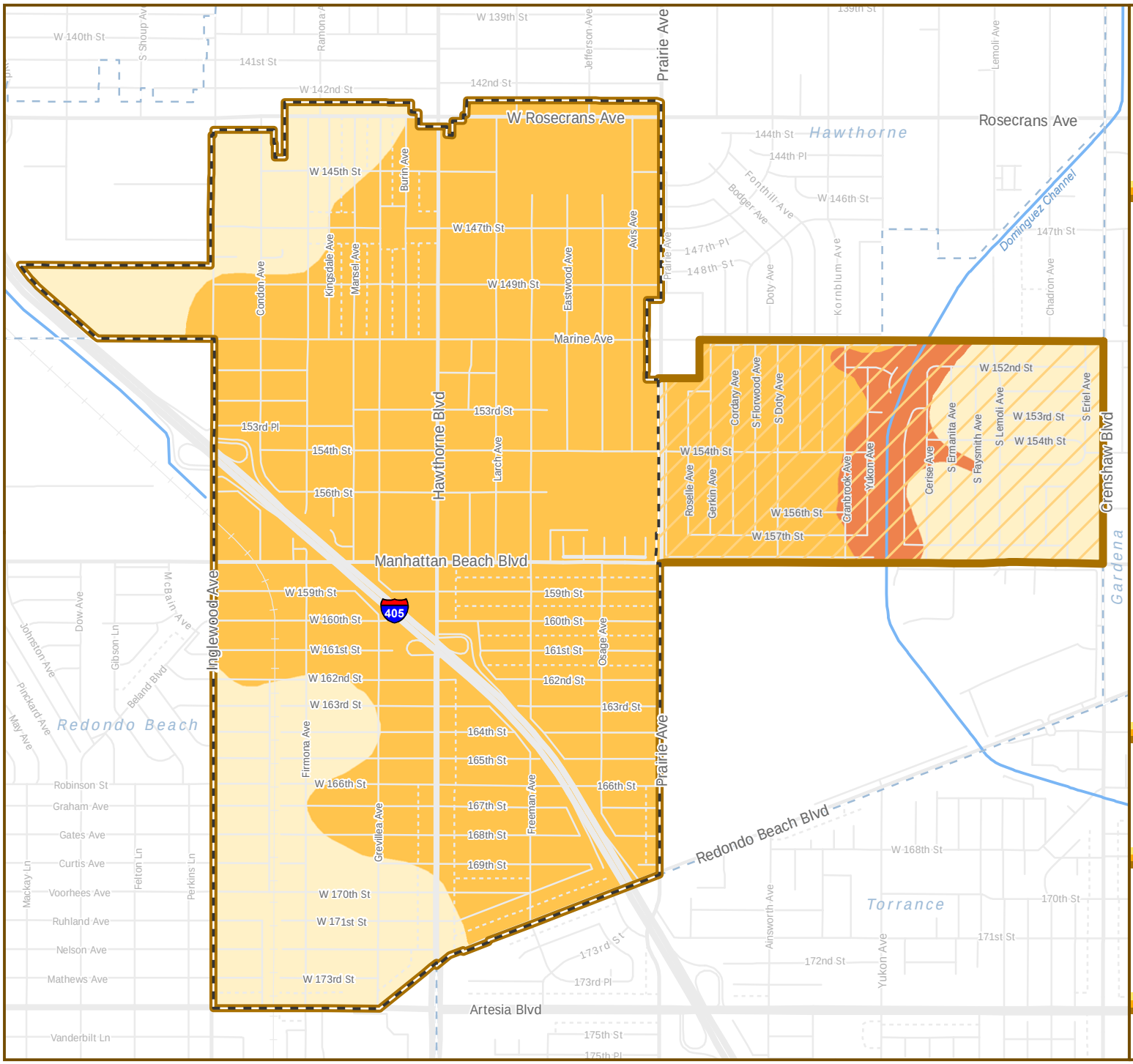
Sources: City of Lawndale; Los Angeles County; NRCS Web Soil Survey, Los Angeles County, California, Southeastern Part (CA696), Survey Area/Tabular Version 7, Spatial Version 4. Date: June 20, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.7-4. Shrink-Swell Potential of Soils

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

Shrink-Swell Potential*

- Low
- Low to Medium
- Low to High

**Shrink-Swell potential of soils is determined by Linear Extensibility. Linear Extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Volume change is reported as a percent change for the whole soil. Shrink-swell potential is low if the soil has a linear extensibility of less than 3%, moderate if 3-6%, high if 6-9%, and very high if greater than 9%. In soil complexes such as the ones shown on this map, linear extensibility is measured and recorded for each soil component, thus creating a range of shrink-swell potentials for each soil unit.*

0 500 1,000
Feet

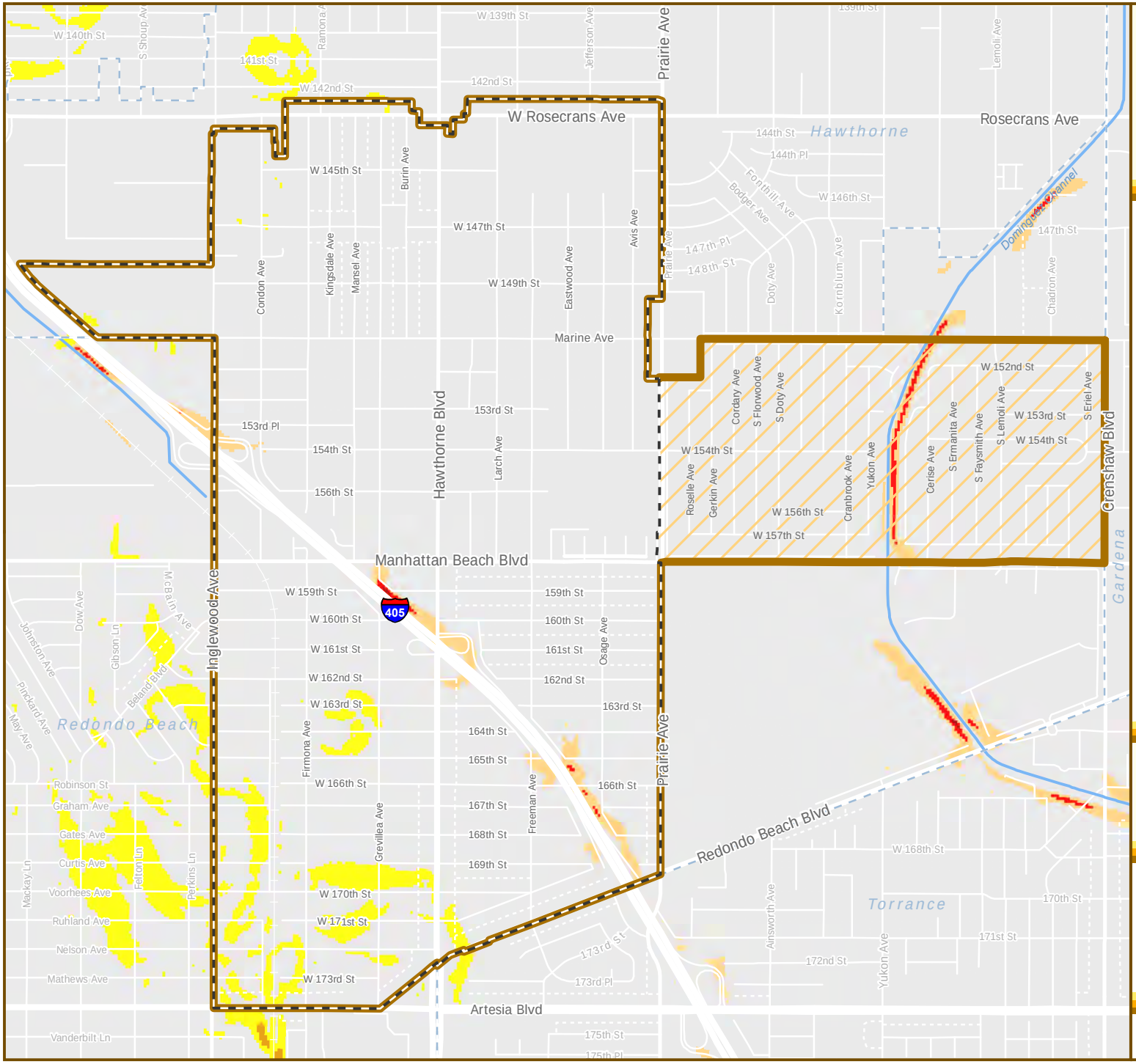
Sources: City of Lawndale; Los Angeles County. NRCS Web Soil Survey, Los Angeles County, California, Southeastern Part (CA696), Survey Area/Tabular Version 7, Spatial Version 4. Date: June 20, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.7-5. Landslide Susceptibility

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

Landslide Susceptibility

Increasing Susceptibility

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; California Geological Survey Map Sheet 58, 2011.
Date: June 20, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group

This page intentionally left blank.

5.8 GREENHOUSE GAS EMISSIONS

5.8.1 PURPOSE

This section identifies the existing climate conditions, the current state of climate change science, and greenhouse gas (GHG) emissions sources within California and the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update. This section is primarily based upon greenhouse gas emissions analysis and modeling prepared by De Novo Planning Group and included as Appendix C, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*.

5.8.2 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGES LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. This is called the greenhouse effect, and leads to global warming as well as an overall global climate change, which includes long-term shifts in temperatures and weather patterns.

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor (H_2O), N_2O, and chlorofluorocarbons (CFCs).

Gases in the atmosphere can contribute to the greenhouse effect both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other greenhouse gases, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the earth (U.S. Environmental Protection Agency 2011).

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but they are, for the most part, solely a product of industrial activities. There are also several gases that do not have a direct global warming effect but indirectly affect terrestrial and/or solar radiation absorption by influencing the formation or destruction of greenhouse gases, including tropospheric and stratospheric ozone. These gases include carbon monoxide (CO), oxides of nitrogen (NO_x), and non-CH_4 volatile organic compounds (NMVOCs). Aerosols, which are extremely small particles or liquid droplets, such as those produced by sulfur dioxide (SO_2) or elemental carbon emissions, can also affect the absorptive characteristics of the atmosphere (U.S. Environmental Protection Agency 2011).

Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three greenhouse gases have increased globally by 40, 150, and 20 percent, respectively.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced approximately 418.2 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2019, meeting the annual Statewide target set by the California Air Resources Board (CARB), which required that California emissions be below 431 $MMTCO_2e$ by 2020 (California Air Resources Board 2021). To meet CARB's Statewide targets, California emissions must further be reduced to below 260 $MMTCO_2e$ by 2030.

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2019, accounting for 41 percent of total GHG emissions in the State (California Air Resources Board 2021). This category was followed by the industrial sector (24 percent), the electricity generation sector (including both in-State and out-of-State sources) (14 percent), the agriculture and forestry sector (7 percent), the residential energy consumption sector (8 percent), and the commercial energy consumption sector (6 percent).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems, and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of water supply for the State. The snowpack portion of the supply could potentially decline by 50 percent to 75 percent by the end of the 21st century. This phenomenon could lead to significant challenges securing an adequate water supply for a growing State population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations,

increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels. If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion, and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. According to the most recent California Climate Change Assessment (*California's Fourth Climate Change Assessment*), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Wildfires

In recent years, the area burned by wildfires has increased in parallel with increasing air temperatures. Wildfires have also been occurring at higher elevations in the Sierra Nevada mountains, a trend which is expected to continue under future climate change. Climate change will likely modify the vegetation in California, affecting the characteristics of fires on the land. Land use and development patterns also play an important role in future fire activity. Because of these complexities, projections of wildfire in future decades in California range from modest changes from historical conditions to relatively large increases in wildfire regimes depending on the time period for the projection and what interacting factors are included in the analysis.

Public Health

Extreme heat conditions are defined as weather that is much hotter than average for a particular time and place—and sometimes more humid, too. Extreme heat is not just a nuisance; it kills hundreds of Americans every year and causes many more to become seriously ill (U.S. Environmental Protection Agency 2016). Nineteen heat-related events occurred from 1999 to 2009 that had significant impacts on human health, resulting in about 11,000 excess hospitalizations. However, the National Weather Service issued Heat Advisories for only six of the events. Heat-Health Events (HHEs), which better predict risk to populations vulnerable to heat, will worsen drastically throughout the State: for example, by midcentury, the Central Valley is projected to experience average HHEs that are two weeks longer, and HHEs could occur four to ten times more often in the Northern Sierra region.

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions.

Energy Resources

Higher temperatures will increase annual electricity demand for homes, driven mainly by the increased use of air conditioning units. High demand is projected in inland and Southern California, and more moderate increases are projected in cooler coastal areas. However, the increased annual residential energy demand for electricity is expected to be offset by reduced use of natural gas for space heating. Increases in peak hourly demand during the hot months of the year could be more pronounced than

changes in annual demand. This is a critical finding for California's electric system, because generating capacity must match peak electricity demand.

It should also be noted that with the electrification of vehicles, there will also be a significant increase in residential energy use in the near future. Those increases are offset by the reduction of internal combustion use.

Water Supply

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply.

Current management practices for water supply and flood management in California may need to be revised for a changing climate. This is in part because such practices were designed for historical climatic conditions, which are changing and will continue to change during the rest of this century and beyond. As one example, the reduction in the Sierra Nevada snowpack, which provides natural water storage, will have implications throughout California's water management system. Even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products Statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts, as well as milk due to the reduced quality of grazing food such as alfalfa.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued climate change will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range

contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different invasive species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Climate change will make forests more susceptible to extreme wildfires. *California's Fourth Climate Change Assessment* found that by 2100, if greenhouse gas emissions continue to rise, the frequency of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and that average area burned Statewide would increase by 77 percent by the end of the century. In the areas that have the highest fire risk, wildfire insurance is estimated to see costs rise by 18 percent by 2055 and the amount of property insured would decrease.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

The United States Geological Survey (USGS) estimates that, under mid to high sea-level rise scenarios, 31 to 67 percent of southern California beaches may completely erode by 2100 without large-scale human interventions (United States Geological Survey 2017). Statewide damages could reach nearly $17.9 billion from inundation of residential and commercial buildings under 50 centimeters (approximately 20 inches) of sea-level rise, which is close to the 95th percentile of potential sea-level rise by the middle of this century. A 100-year coastal flood, on top of this level of sea-level rise, would almost double the costs.

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Rising sea levels would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

5.8.3 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National ambient air quality standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. Environmental Protection Agency (EPA) is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and

secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

U.S. Environmental Protection Agency Endangerment Finding.

The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA (2007)*. The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2, CH_4, N_2O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF6]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Compliance with Federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain Federal, state, and local government and private fleets to purchase a percentage of light duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are included in EPAct. Federal tax deductions will be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005

The Energy Policy Act of 2005 was signed into law on August 8, 2005. Generally, the act provides for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for a clean renewable energy

and rural community electrification; and establishes a Federal purchase requirement for renewable energy.

Clean Power Plan and New Source Performance Standards for Electric Generating Units 2015

On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the Clean Power Plan pending resolution of several lawsuits. Additionally, in March 2017, the EPA Administrator was directed to review the Clean Power Plan in order to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA (49 U.S.C. Section 101 et seq.) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that metropolitan planning organizations (MPOs), were to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process was then to address these policies. Another requirement was to consider the consistency of transportation planning with Federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a criterion, along with cost and other values that determine the best transportation solution.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

The Fixing America's Surface Transportation Act (FAST Act) went into effect on December 4, 2015, to provide long-term funding for surface transportation with a focus on improving mobility on America's highways, creating jobs and supporting economic growth, and accelerating project delivery and promoting innovation.

U.S. Federal Climate Change Policy

According to the EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The Federal government's goal is to reduce net GHG emissions by 50 to 52 percent from 2005 levels in 2030 and reach net-zero emissions no later than 2050 (U.S.

Department of State 2021). In addition, the EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs. However, as of this writing, there are no adopted Federal plans, policies, regulations, or laws directly regulating GHG emissions.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA issued a final rule for mandatory reporting of GHGs from large GHG emissions sources in the United States. In general, this national reporting requirement will provide EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons or more of CO_2 per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost effective opportunities to reduce emissions in the future. Reporting is at the facility level, except that certain suppliers of fossil fuels and industrial greenhouse gases along with vehicle and engine manufacturers will report at the corporate level. An estimated 85 percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule.

Presidential Executive Order 13783

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all Federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of carbon, nitrous oxide, and methane.

STATE

California Air Resources Board

California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both Federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], §2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

On July 26, 2007, CARB adopted emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-

propelled off-road diesel vehicles. This regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. Additionally, in 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, §2025, subsection (h)). While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

California Executive Orders S-3-05 and S-20-06, and Assembly Bill 32

On June 1, 2005, Governor Schwarzenegger signed EO S-3-05. The goal of this EO is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. EO-S-20-06 establishes responsibilities and roles of the Secretary of Cal/EPA and State agencies in climate change.

In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." EO S-20-06 further directs State agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team.

Climate Change Scoping Plan

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide-equivalent (CO2e) emissions by 169 million metric tons (MMT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 MMT of CO_2e under a business-as-usual scenario. (This is a reduction of 42 MMT CO_2e, or almost 10 percent, from 2002–2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.) The Scoping Plan also breaks down the amount of GHG emissions reductions CARB recommends for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the State. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expands the scope of the plan further by focusing on the strategy for achieving the State's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target

codified into law by SB 32), and substantially advances toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The 2017 Update relies on the preexisting programs paired with an extended, more stringent Cap-and-Trade Program, to deliver climate, air quality, and other benefits. The 2017 Update identifies new technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction goals.

CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

Executive Order S-13-08

EO S-13-08 was issued on November 14, 2008. The EO is intended to hasten California's response to the impacts of global climate change, particularly sea level rise, and directs State agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State's transportation systems to sea level rise, and requiring the Office of Planning and Research and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaption strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry; biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

Assembly Bill 1493

In response to AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961), and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. For passenger cars and light-duty trucks 3,750 pounds or less loaded vehicle weight (LVW), the 2016 GHG emission limits are approximately 37 percent lower than during the first year of the regulations in 2009. For medium-duty passenger vehicles and light-duty trucks 3,751 LVW to 8,500 pounds gross vehicle weight (GVW), GHG emissions are reduced approximately 24 percent between 2009 and 2016.

CARB requested a waiver of Federal preemption of California's Greenhouse Gas Emissions Standards. The intent of the waiver is to allow California to enact emissions standards to reduce carbon dioxide and other

greenhouse gas emissions from automobiles in accordance with the regulation amendments to the CCRs that fulfill the requirements of AB 1493. The EPA granted a waiver to California to implement its greenhouse gas emissions standards for cars.

Assembly Bill 1007

Assembly Bill 1007, (Pavley, Chapter 371, Statutes of 2005) directed the CEC to prepare a plan to increase the use of alternative fuels in California. As a result, the CEC prepared the State Alternative Fuels Plan in consultation with the State, Federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-State production. The Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.

Bioenergy Action Plan – Executive Order #S-06-06

Executive Order (EO) #S-06-06 establishes targets for the use and production of biofuels and biopower and directs State agencies to work together to advance biomass programs in California while providing environmental protection and mitigation. The EO establishes the following target to increase the production and use of bioenergy, including ethanol and biodiesel fuels made from renewable resources: produce a minimum of 20 percent of its biofuels within California by 2010, 40 percent by 2020, and 75 percent by 2050. The EO also calls for the State to meet a target for use of biomass electricity.

Senate Bill 32

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown (Office of Governor Edmund G. Brown Jr., 2016). SB 32 and AB 197 amend HSC Division 25.5, establish a new GHG reduction target of 40 percent below 1990 levels by 2030, and include provisions to ensure the benefits of State climate policies reach into disadvantaged communities.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. SB 743 was passed to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA. The revisions to the State CEQA Guidelines establish new criteria for determining the significance of a project's transportation impacts that will more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHGs. The 2017 Update to the Scoping Plan identified that slower VMT growth from more efficient land use development patterns would promote achievement of the State's climate goals.

The Office of Planning and Research (OPR) published the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) to provide recommendations for jurisdictions to apply VMT metrics

and thresholds compliant with SB 743. OPR's advisory includes recommendations pertaining to screening criteria, metrics, and significant impact thresholds. OPR's recommendations are not binding and lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.

For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020. More detail about SB 743 is provided in the setting section of Section 5.17, *Transportation*.

Executive Order B-48-18: Zero-Emission Vehicles

In January 2018, EO B-48-18 was signed into law and requires all State entities to work with the private sector to have at least five million zero-emission vehicles (ZEVs) on the road by 2030, as well as install 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. It specifies that 10,000 of the electric vehicle charging stations should be direct current fast chargers. This Executive Order also requires all State entities to continue to partner with local and regional governments to streamline the installation of ZEV infrastructure. The Governor's Office of Business and Economic Development is required to publish a Plug-in Charging Station Design Guidebook and update the 2015 Hydrogen Station Permitting Guidebook to aid in these efforts. All State entities are required to participate in updating the 2016 Zero-Emissions Vehicle Action Plan (Governor's Interagency Working Group on Zero-Emission Vehicles 2016) to help expand private investment in ZEV infrastructure with a focus on serving low-income and disadvantaged communities. Additionally, all State entities are to support and recommend policies and actions to expand ZEV infrastructure at residential uses through the Low Carbon Fuel Standard Program, and recommend how to ensure affordability and accessibility for all drivers.

Assembly Bill 2076: California Strategy to Reduce Petroleum Dependence

In response to the requirements of Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), the CEC and CARB developed a strategy to reduce petroleum dependence in California. The strategy, *Reducing California's Petroleum Dependence*, was adopted by the CEC and CARB in 2003. The strategy recommends that California reduce on-road gasoline and diesel fuel demand to 15 percent below 2003 demand levels by 2020 and maintain that level for the foreseeable future; the Governor and Legislature work to establish national fuel economy standards that double the fuel efficiency of new cars, light trucks, and sport utility vehicles (SUVs); and increase the use of non-petroleum fuels to 20 percent of on-road fuel consumption by 2020 and 30 percent by 2030.

Assembly Bill 2188: Solar Permitting Efficiency Act

Assembly Bill (AB) 2188, enacted in California in 2015, required local governments to adopt a solar ordinance by September 30, 2015 that creates a streamlined permitting process that conforms to the best practices for expeditious and efficient permitting of small residential rooftop solar systems. The act is designed to lower the cost of solar installations in California and further expand the accessibility of solar to more California homeowners. The bulk of the time and cost savings associated with a streamlined permitting process comes from the use of a standardized eligibility checklist and a simplified plan. This bill also shortens the number of days for those seeking Homeowner's Association (HOA) approval for a written denial of a proposed solar installation.

Governor's Low Carbon Fuel Standard (Executive Order #S-01-07)

Executive Order #S-01-07 establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 through establishment of a Low Carbon Fuel Standard. The Low Carbon Fuel Standard is incorporated into the State Alternative Fuels Plan and is one of the proposed discrete early action GHG reduction measures identified by the CARB pursuant to AB 32.

Senate Bill 97

Senate Bill (SB) 97 (Chapter 185, 2007) required OPR to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. OPR prepared its recommended amendments to the State CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of greenhouse gas emissions and the effects of greenhouse gas emissions in draft CEQA documents. The Amendments became effective on March 18, 2010.

Senate Bill 375

SB 375 (Stats. 2008, ch. 728) (SB 375) was built on AB 32 (California's 2006 climate change law). SB 375's core provision is a requirement for regional transportation agencies to develop a Sustainable Communities Strategy (SCS) in order to reduce GHG emissions from passenger vehicles. The SCS is one component of the existing Regional Transportation Plan (RTP).

The SCS outlines the region's plan for combining transportation resources, such as roads and mass transit, with a realistic land use pattern, in order to meet a State target for reducing GHG emissions. The strategy must take into account the region's housing needs, transportation demands, and protection of resource and farmlands.

Additionally, SB 375 modified the State's Housing Element Law to achieve consistency between the land use pattern outlined in the SCS and the Regional Housing Needs Assessment allocation. The legislation also substantially improved cities' and counties' accountability for carrying out their housing element plans.

Finally, SB 375 amended CEQA (Pub. Resources Code, Section 21000 et seq.) to ease the environmental review of developments that help reduce the growth of GHG emissions.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued EO B-30-15, which establishes a State GHG reduction target of 40 percent below 1990 levels by 2030. The new emission reduction target provides for a mid-term goal that would help the State to continue on course from reducing GHG emissions to 1990 levels by 2020 (per AB 32) to the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050 (per EO S-03-05). This is in line with the scientifically established levels needed in the U.S. to limit global warming below two degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions. EO B-30-15 also addresses the need for climate adaptation and directs State government to:

- Incorporate climate change impacts into the State's Five-Year Infrastructure Plan;

- Update the Safeguarding California Plan, the State climate adaptation strategy, to identify how climate change will affect California infrastructure and industry and what actions the State can take to reduce the risks posed by climate change;
- Factor climate change into State agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the State. The program will have significant energy demand implications as battery, fuel cell, and/or plug-in hybrid electric vehicle sales increase overtime, creating new demand for electricity services both in residential and commercial buildings (e.g., charging stations) as well as demand for new EV and hydrogen fuel cell charging stations. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. According to the CARB, by 2025, when the rules will be fully implemented, the Statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the Statewide fleet in 2016.

California Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations, known as the Building Energy Efficiency Standards (Standards), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On January 1, 2010, the California Building Standards Commission adopted CALGreen and became the first state in the United States to adopt a statewide green building standards code.

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the Standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

The CEC estimates that the 2022 Title 24 standards will reduce 10 million metric tons of GHG over 30 years (CEC 2021). When compared to the 2019 Title 24 standards, the 2022 update focuses on: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic (PV) system and battery storage standards; and strengthening ventilation standards to improve indoor air quality.

California Green Building Standards (CALGreen)

The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed CALGreen in an effort to meet the State's landmark initiative Assembly Bill (AB) 32 goals, which established a comprehensive program of cost-effective reductions of greenhouse gas (GHG) emissions to 1990 levels by 2020. CALGreen was developed to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, and healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g. lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials (U.S. Green Building Council 2022).

Executive Order B-55-18

EO B-55-18, issued by Governor Brown in September 2018, establishes a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing Statewide targets of reducing the State's GHG emissions.

Senate Bill 1078 (2002), Senate Bill 107 (2006), Executive Order S-14-08 (2008), Senate Bill 350 (2015), and Senate Bill 100 (2018)

SB 1078 established the Renewable Portfolio Standard (RPS) program, which required retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. This goal has subsequently been accelerated several times. SB 107 changed the target date to 2010 and Executive Order S-14-08 expanded the State's RPS to 33 percent renewable power by 2020. SB 350 expanded the RPS by requiring retail seller and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. SB 100 accelerated and expanded the standards set forth in SB 350 by updating the RPS program to 50 percent eligible renewable energy resources by 2025 and 60 percent by 2030. In addition, SB 100 sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045.

Assembly Bill 939, Assembly Bill 341, and Assembly Bill 1826

The Integrated Solid Waste Management Act of 1989 (AB 939) (California Public Resources Code Section 40050 et seq.) established an integrated waste management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every city and county in California to

divert 50 percent of its waste from landfills whether through waste reduction, recycling, or other means. AB 341, which took effect on July 1, 2012, amended the California Integrated Waste Management Act of 1989 to set California's recycling goal of 75 percent by the year 2020. AB 1826 requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. AB 1826 also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses and multi-family developments that consist of five or more units.

Senate Bill 1383

SB 1383, issued by Governor Brown in September 2016, set Statewide methane emissions reduction targets to reduce emissions of short-lived climate pollutants (SLCP). The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The methane emission reduction goals include a 75 percent reduction in the level of statewide disposal of organic waste from 2014 levels by 2025.

Senate Bill 379

In 2015, SB 379 revised California Government Code Section 65302 et seq. to require that cities and counties update their safety elements to address climate adaptation and resiliency strategies applicable to their jurisdiction. The updates are required at the next update of their local hazard mitigation plan (LHMP) on or after January 1, 2017. Local jurisdictions without an LHMP must update their safety elements beginning on or before January 1, 2022. The safety element update must include a vulnerability assessment identifying the risks that climate change poses to the local jurisdiction, and feasible implementation strategies to protect the community.

Assembly Bill 1279

Assembly Bill 1279, passed in 2022, declares the State's objective to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter. This is in addition to, and does not replace or supersede, Statewide greenhouse gas emissions reduction targets.

Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB would employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under HSC Division 25.5, CARB designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve the State's emission-reduction mandate of returning to 1990 levels of emissions by 2020 and 40 percent below 1990 levels by 2030 (17 CCR §§95800 to 96023). Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO2e per year), caps decline over time, and facilities subject to the cap can trade

permits to emit GHGs. The Statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration (17 CCR §§95800 to 96023). On July 17, 2017 the California legislature passed AB 398, extending the Cap-and-Trade Program through 2030.

An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a statewide basis.

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program would be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program would be responsible for relatively more emissions reductions. In other words, the Cap-and-Trade Program functions similarly to an insurance policy for meeting California's GHG emissions reduction mandates.

LOCAL

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a Policy on Global Warming and Stratospheric Ozone Depletion in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan (AQMP). In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of CFCs, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of HCFCs by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

SCAG's Connect SoCal: Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

Southern California Association of Governments (SCAG) is the metropolitan planning organization (MPO) for the region in which the City of Lawndale is located. In 2020, SCAG adopted Connect SoCal, the 2020-2045 RTP/SCS, which is an update to the previous 2016 RTP/SCS. The 2020 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for Federal and State funding, and to expand the potential for all people to use active transportation.

South Coast Air Quality Management District Air Quality Management Plan

The South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) is the regional blueprint for achieving air quality standards in the South Coast Air Basin, an area that includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties. Through a combination of regulatory and incentive approaches via partnerships at all levels of government, healthy air quality is within reach.

SCAQMD approved the Final 2022 AQMP on December 2, 2022. The Final 2022 AQMP builds upon measures already in place from previous AQMPs to reduce air pollution and meet the Federal ozone standard established by the U.S. EPA in 2015. It includes a variety of additional actions and strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission emissions technologies, when cost-effective and feasible, and low NO_X technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard.

South Bay Bicycle Master Plan: Draft Final Plan

The South Bay Bicycle Master Plan (August 2011) is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance over a period of 20 years. The Plan recommends programs meant to promote and increase bicycle ridership for all levels of ability across the South Bay.

City of Lawndale Climate Action Plan

The City of Lawndale, in cooperation with the South Bay Cities Council of Governments, has developed a Climate Action Plan (CAP) to reduce GHG emissions within the City. The City's CAP serves as a guide for action by setting GHG emission reduction goals and establishing strategies and policies to achieve desired

outcomes over a 20-year period (2035). The CAP identifies community-wide strategies to conserve energy and reduce GHG emissions from a range of sources within the jurisdiction, including transportation, land use, energy generation and consumption, water, and waste.

5.8.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to climate change-related impacts:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (refer to Impact Statement GHG-1); or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (refer to Impact Statement GHG-1).

ANALYSIS APPROACH AND METHODOLOGY

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the *combined* effects from *both* the proposed Project *and* other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the project's *incremental* effects are cumulatively considerable" and thus significant in and of themselves. The cumulative global project list for this issue (climate change) comprises anthropogenic (i.e., human-made) GHG emissions sources across the globe. No project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate, but rather effects are shown to be caused by the cumulative emissions from across the globe. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

OPR recommends that lead agencies under CEQA create a plan to reduce GHG emissions that meets the goals of both CEQA and general plans. OPR states that the GHG emissions reduction plan can be either a stand-alone CAP or directly part of the general plan. The City of Lawndale, in cooperation with the South Bay Cities Council of Governments, developed a Climate Action Plan (CAP) in 2017 to reduce GHG emissions within the City of Lawndale. The City's CAP serves as a guide for action by setting GHG reduction goals and establishing strategies and policy to achieve desired outcomes.

Quantitative disclosure of the Project's GHG emissions is provided below. Additionally, an analysis of the proposed Project's consistency with the City of Lawndale CAP and the California Statewide 2030 GHG emissions target of 40 percent below 1990 levels by 2030 (as encapsulated by SB 32), as well as a qualitative analysis of the Project's consistency with the California statewide net zero target by 2045 (as encapsulated in AB 1279), is also provided.

5.8.5 IMPACTS AND MITIGATION MEASURES

GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Implementation of the General Plan Update would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

PROJECT GREENHOUSE GAS EMISSIONS

Construction Emissions

Potential future development associated with implementation of the General Plan Update would generate GHGs during the construction and operational phases of the Project. The proposed Project's primary source of construction-related GHGs would result from emissions of CO_2 associated with individual development projects' construction and worker vehicle trips; refer to Table 5.8-1, *Construction GHG Emissions (Metric Tons/Year)*. Additionally, site-specific development would likely require limited demolition and grading, and would also include site preparation, paving, building construction, and architectural coating phases. Construction was assumed to occur starting in year 2023 and ending in year 2045.[1] Since specific development projects are not currently proposed, default parameters were used for construction activities, except for the construction schedule, which was adjusted to reflect the buildout year of 2045. See Appendix C, *Air Quality, Energy and Greenhouse Gas Emissions Modeling Data*, for more detail.

Table 5.8-1
Construction GHG Emissions (Metric Tons/Year)

Year	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	R	CO_2e
Maximum	0	35,703	35,703	1.53	2.66	50.7	36,584
Source: CalEEMod version 2022.1							

As shown in Table 5.8-1, Project construction-related activities would generate a maximum of approximately 36,584 $MTCO_2e$ of GHG emissions in a single year. Total GHG emissions construction-related activities would be approximately 677,483, over the entire course of construction (assumed to start in year 2023 and end in year 2045. See Appendix C, *Air Quality, Energy and Greenhouse Gas Emissions*

[1] Although construction associated with the Project is not anticipated to start until year 2025, year 2023 was used as a starting year for the purposes of modeling for the sake of a conservative analysis, since earlier construction years use less efficient on- and off-road construction equipment, compared with later years.

Modeling Data, for more detail. Once construction is complete, the generation of construction-related GHG emissions would cease.

Operational Emissions

The operational phase of future development associated with implementation of the proposed Project would generate GHGs primarily from the individual development's operational vehicle trips and building energy (electricity and natural gas) usage; refer to Table 5.8-2, *Operational GHG Emissions 2040 (Metric Tons/Year)*. Other sources of GHG emissions would be minimal.

Table 5.8-2
Operational GHG Emissions 2045 (Metric Tons/Year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	R	CO_2e
Area	0	511	511	0.02	0	0	513
Energy	0	80,808	80,808	8.31	0.56	0	81,184
Mobile	0	107,424	107,424	4.29	4.45	12.4	108,869
Waste	211	0	2,111	211	0	0	7,385
Water	529	3,213	3,742	54.7	1.34	0	5,509
Refrigerants	0	0	0	0	0	44.5	44.5
Total	**2,640**	**191,956**	**194,596**	**278**	**6.35**	**56.9**	**203,504**
Source: CalEEMod version 2022.1							

As shown in Table 5.8-2, Project operational GHG emissions would total approximately 203,504 $MTCO_2e$ annually. The Lawndale General Plan Update includes goals, policies, and actions to reduce GHG emissions, as provided below. The proposed Project would provide for more residential, commercial, and mixed-use development in proximity to each other, as well as in proximity to transit. Further, Project implementation would provide for a denser urban environment with improved amenities that support active (non-motorized) transportation opportunities within the Planning Area. Accordingly, as discussed further below, the Project is consistent with plans and policies designed to achieve the State's GHG reduction goals. However, it cannot be guaranteed that construction and operational emissions would result in a less than significant impact with regards to GHG impacts, as discussed in further detail below.

CONSISTENCY WITH APPLICABLE GHG PLANS, POLICIES, OR REGULATIONS

Lawndale Climate Action Plan - Community GHG Emissions Inventory, Forecasts, and Targets

The following summarizes the Lawndale's CAP's quantification of baseline GHG emissions, the establishment of GHG emissions targets that demonstrate a level which the contribution of GHG emissions from activities covered by the CAP would not be cumulatively considerable, and forecasts for future year GHG emissions. These analyses and results are provided in the CAP and are briefly summarized below.

GHG Emissions Inventory

The first step towards reducing GHG emissions is estimating the baseline and future expected emissions. These estimates are categorized by sources – commercial and residential energy, on-road transportation,

solid waste, water, wastewater, and off-road sources. The City completed inventories for 2005, 2007, 2010, and 2012. The baseline year is 2005, which means that the future emissions reductions will be measured against emissions that occurred in 2005.

Table 5.8-3, *City of Lawndale Community-wide GHG Emissions by Sector from 2005 to 2012*, provides a summary of the City's 2005 (baseline) and 2012 community inventories. As shown in Table 5.8-3, the transportation sector is the largest contributor to emissions.

Table 5.8-3
City of Lawndale Community-wide GHG Emissions by Sector from 2005 to 2012

Sector	2005	2012	% Change 2005 to 2012
On-Road Transportation	66,334	71,769	8.2%
Residential Energy	31,749	31,330	-1.3%
Commercial Energy	20,664	16,856	-18.4%
Solid Waste	5,456	3,442	-36.9%
Water	5,214	3,223	-38.2%
Off-Road Equipment	1,012	108	-89.3%
Wastewater	120	91	-24.2%
Total	130,549	126,819	-2.9%
Source: South Bay Cities Council of Governments, *City of Lawndale Climate Action Plan*, December 2017.			

GHG Emissions Forecasts and Reduction Target

Emission estimates for future years are scenarios based on assumptions about the future. The 2020 Business As Usual 2020 BAU) scenario assumed that no new policies, plans, programs, or regulations designed to reduce GHG emissions will be adopted". The 2020 and 2035 Adjusted Business As Usual (ABAU) scenarios, in comparison, do take into account the expected reduction impacts resulting from Federal and State mandated laws such as higher vehicle fuel efficiency standards and increases in the percentage of renewable energy production.

In 2015, the City set GHG emission reduction goals consistent with the State's AB 32 GHG emission reduction targets. The City's target was calculated as a 15 percent decrease from 2005 levels by 2020 as recommended in the State AB 32 Scoping Plan. A longer-term goal was established for 2035 to reduce emissions by 49 percent below 2005 levels. These goals put the City on a path towards helping the State meet its long-term 2050 goal to reduce emissions by 80 percent below 1990 levels.

GHG Reduction Measures

The City of Lawndale CAP includes a large array of strategies to reduce GHG emissions. These strategies include:

- Land Use and Transportation: Facilitate pedestrian and neighborhood development and identify ways to reduce automobile emissions including supporting zero emission vehicle infrastructure, improving pedestrian and bicycle infrastructure, enhancing public transit service, and supporting reductions in single-occupancy vehicle use.
- Energy Efficiency: Emphasize energy efficiency retrofits for existing buildings, energy performance requirements for new construction, water efficient landscaping, financing programs that will allow home and business owners to obtain low-interest loans for implementing energy efficiency in their buildings.
- Solid Waste: Focus on increasing waste diversion and encouraging participation in recycling and composting throughout the community.
- Urban Greening: Contain measures that create "carbon sinks" as they store GHG emissions that are otherwise emitted into the atmosphere as well as support health of the community.
- Energy Generation and Storage: Demonstrate the City's commitment to support the implementation of clean, renewable energy while decreasing dependence on traditional, GHG emitting power sources.

Implementation and Monitoring

The City's CAP is a policy-level document that guides the implementation of the climate action plan's GHG reduction measures. On-going monitoring and reporting of GHG reduction impacts and their cost effectiveness will enable City staff to make regular adjustments to the CAP. The monitoring and implementation process should anticipate the possible need to adjust to unforeseen circumstances, incorporated innovative new technologies, and evolve with the advancing science of climate change. Measure-Tracking tools are ways for the City to monitor the reductions that result from the implementation of GHG reduction actions. The Climate Action Implementation Coordinator or the City Climate Action Team could be tasked to maintain records of reduction measure implementation; additionally, as funding is available, they could ensure that periodic updates to the emissions inventory are completed as a way to quantify GHG reductions. Conducting future inventories also allows the City to better assess their GHG emissions as better data and new methods for calculating reductions become available. Additionally, the City can continue to receive assistance from the SBCCOG for their implementation and monitoring efforts.

Project Consistency with City of Lawndale CAP

Proposed General Plan Update Resources Management Element Action RM-4a would require the City to implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts, as well as to develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions, and work with the SBCCOG and/or other local, regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

While the reduction of GHG emissions puts the City on the path to achieve its long-term emissions targets, since the CAP was developed in 2017, prior to AB 1279, the City would need additional actions to keep the City on a path that aligns with the State of California's longer-term goal for 2045.

2022 Scoping Plan Consistency

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045, as encapsulated by AB 1279. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

Table 5.8-4, *Project Consistency with the 2022 Scoping Plan*, summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 5.8-4, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping.

Table 5.8-4
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Area		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	Mandatory Compliance. Approximately 15 percent of California's major anthropogenic sources of black carbon include fireplaces and woodstoves.[1] The Project would not include hearths (woodstove and fireplaces) as mandated by this rule.
Energy		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires 50 percent by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	No Conflict. The Project would utilize electricity provided by Southern California Edison (SCE), which is required to meet the 2020, 2030, 2045, and 2050 performance standards. In 2018, 31 percent of SCE's electricity came from renewable resources.[2] By 2030 SCE plans to achieve 80 percent carbon-free energy.[3]
All Electric Appliances for New Residential and Commercial Buildings (AB 197)	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	Mandatory Compliance. Project-specific plans would be required to demonstrate that only all electric appliances would be installed for residential land uses starting in 2026, and for commercial uses starting in 2029, consistent with this requirement.
California Code of Regulations, Title 24, Building Standards Code	Requires compliance with energy efficiency standards for residential and nonresidential buildings.	Mandatory Compliance. Future development associated with Project implementation would be required to meet the applicable requirements of the adopted Title 24 Building Energy Efficiency Standards, including installation of rooftop solar panels and additional CALGreen requirements (see discussion under CALGreen Code requirements below).

Table 5.8-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans are required to be ENERGY STAR compliant.	Mandatory Compliance. Project-specific construction plans would be required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant.
	HVAC system designs are required to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	Mandatory Compliance. Project-specific construction plans would be required to demonstrate that the HVAC system meets the ASHRAE standards.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. Specific development projects would be required to install air filtration systems (MERV 8 or higher) as part of its compliance with the adopted Title 24 Building Energy Efficiency Standards.
	Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance the CALGreen Code.
Mobile Sources		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems, and reduction of vehicle miles traveled.	Consistent. The Project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. As demonstrated in Table 5.8-5, the Project would comply with the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), and therefore, the Project would be consistent with SB 375.

Table 5.8-4 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Water		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non- residential uses.	Mandatory Compliance. Refer to the discussion under the adopted Title 24 Building Standards Code and CALGreen Code, above.
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	Consistent. Refer to the discussion under the adopted Title 24 Building Standards Code and CALGreen Code, above. Also, refer to Section 5.10, *Hydrology and Water Quality*.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Mandatory Compliance. The Project would be required to comply with AB 341 which requires multifamily residential dwelling of five units or more to arrange for recycling services. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.

Notes:
1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, Figure 4: California 2013 Anthropogenic Black Carbon Emission Sources, November 2017.
2. California Energy Commission, *2018 Power Content Label Southern California Edison,* https://www.energy.ca.gov/sites/default/files/2020-01/2018_PCL_Southern_California_Edison.pdf, accessed June 24, 2020.
3. Southern California Edison, *The Clean Power and Electrification Pathway,* https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20187/g17-pathway-to-2030-white-paper.pdf, accessed June 24, 2020.
4. California Energy Commission, *2013 California Energy Efficiency Potential and Goals Study*, Appendix Volume I, August 15, 2013.

AB 1279 Consistency

Assembly Bill 1279, passed in 2022, declares the State's objective to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative greenhouse gas emissions thereafter. This is in addition to, and does not replace or supersede, Statewide greenhouse gas emissions reduction targets. CARB's 2022 Scoping Plan is designed to ensure the State would meet the State's GHG emissions goals as encapsulated in AB 1279. As described above, the proposed Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping However, although the Project would not conflict with the 2022 Scoping Plan, this is not sufficient to ensure that individual development projects associated with the proposed Project would be consistent with the net zero greenhouse gas emissions target encapsulated by AB 1279. Therefore, since full consistency between the proposed Project and AB 1279 cannot be ensured at this programmatic level of analysis, implementation of the proposed Project could result in a significant impact on the environment due to the release of GHGs.

SCAG RTP/SCS Consistency

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The 2020 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020 RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's 2020 RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The 2020 RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for Federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The 2020 RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the 2020 RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the State. The Project's consistency with the 2020 RTP/SCS goals is analyzed in detail in Table 5.8-5, *Project Consistency with the 2020-2045 RTP/SCS*.

As depicted in Table 5.8-5, the Project would be consistent with the 2020 RTP/SCS through various polices. The General Plan Update's goals, policies, and actions would support development that is encouraged by the 2020 RTP/SCS to reduce VMT and expand multi-modal transportation options in order for the region to achieve GHG reductions from the land use and transportation sectors required by SB 375, which, in turn, advances the State's long-term climate policies. By furthering implementation of SB 375, the General Plan Update supports regional land use and transportation GHG reductions consistent with State regulatory requirements. Therefore, the Project would be consistent with the GHG reduction-related actions and strategies contained in the 2020 RTP/SCS.

Table 5.8-5
Project Consistency with the 2020-2045 RTP/SCS

SCAG Goals	Consistency Analysis
Goal 1: Encourage regional economic prosperity and global competitiveness.	Consistent. The proposed Project would provide for increased residential development at higher densities in proximity to areas served by transit, jobs and serves, which would promote economic prosperity and development of the Planning Area in an orderly and market-driven manner, consistent with local priorities.
Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent. Although this Project is not a transportation improvement project, the Project would allow for infill development in locations near existing transit routes, goods and services. The availability of public transportation and the focus on increasing density relative to the existing public transportation, enables Project implementation to reduce VMT per service population, and associated transportation-related emissions, compared to existing conditions and the existing land use plan for the Planning Area.
Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.	Not applicable. This is not a transportation improvement project and is therefore not applicable.
Goal 4: Increase person and goods movement and travel choices within the transportation system.	Not applicable. This is not a transportation improvement project and is therefore not applicable. However, the Project would not reduce person and goods movement and travel choices within the transportation system.
Goal 5: Reduce greenhouse gas emissions and improve air quality.	Consistent. The Planning Area is located within an urban area. The location of the Planning Area within an urbanized area served by existing transit, and implementation of the proposed General Plan Update land uses and associated development potential, would reduce VMT per employee and VMT per capita compared to existing conditions, which would reduce GHG and air quality emissions.
Goal 6: Support healthy and equitable communities	Consistent. The Project would provide for more residential and commercial development in proximity to each other, as well as in proximity to existing transit. Further, Project implementation would provide for a denser urban environment with improved amenities that support active (non-motorized) transportation opportunities, including walking and bicycling within the Planning Area. Additionally, the Project would reduce VMT per employee and VMT per capita compared to existing conditions, which would reduce GHG and air quality emissions. Therefore, overall, the Project would support the goal of supporting healthy and equitable communities.

Table 5.8-5 (continued)
Project Consistency with the 2020-2045 RTP/SCS

SCAG Goals	Consistency Analysis
Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	Not applicable. This is not a project-specific policy and is therefore not applicable.
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Not applicable. This is not a project-specific policy and is therefore not applicable.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent. Implementation of the General Plan Update would allow for a variety of housing types at varying densities, especially within the Hawthorne Boulevard Specific Plan area, which would be supported by a variety transportation options, including local bus routes.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	Not applicable. The Planning Area is urbanized and fully developed. The Planning Area does not include any natural or agricultural lands.
Source: Southern California Association of Governments, Connect SoCal – The Regional Transportation Plan/Sustainable Communities Strategy, 2020.	

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the 2020 RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in Table 5.8-5, the proposed Project would be consistent with the stated goals of the 2020 RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

Conclusion

In order to further reduce GHG emissions associated with buildout of the General Plan Update, the City has included numerous goals, policies and actions in the General Plan Update aimed at reducing GHG emissions and promoting sustainability in the Planning Area. The General Plan Update proposes goals, policies and actions that are specifically relevant to climate change and GHG emissions and energy consumption within the Planning Area. Specifically, the General Plan Update Resources Management Element includes Policy RM-4.1, which supports regional efforts, including those organized through the SCAQMD, SCAG, the SBCCOG, and CARB to implement the regional AQMP. Policy RM-4.3 aligns the City's local GHG reduction targets with the statewide GHG reduction targets of AB 32, and aligns the City's GHG reduction goal with the Statewide GHG reduction goal of Executive Order S-03-05. Policy RM-4.9 requires the City to consider and adopt new local policies and programs that would help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan. Additionally, Action RM-4a requires the City to Implement the local GHG reduction measures identified in the City of

Lawndale CAP, participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts, develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions, and work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Furthermore, numerous policies and programs in the General Plan Update address sustainable development, which influence operational mobile, energy, and area-source emissions in the Planning Area. For example, the proposed Resource Management Element Policy RM-4.6 encourages and incentivizes higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. Additional policies and actions throughout the Land Use and Mobility Elements promote reductions in VMT through the mix and density of land uses, walkable neighborhood design, bicycle facilities and infrastructure, the expansion of trail networks, and public transportation facilities and infrastructure. Specifically, the proposed Land Use Element includes Policy LU-1.1 which promotes an appropriate land use plan that promotes efficient development and multiple transportation options. The proposed Mobility Element contains Policy M-3.1, which requires the City to apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities); Policy M-3.2, which requires the City to pursue multi-modal connectivity; Policy M-5.3, which requires new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage; Policy M-6.1, which requires the City to implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles; Policy M-6.2, which requires the City to coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities; Policy M-6.3, which requires the City to allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision. While these policies and actions would further assist the City in reducing GHG emissions, the associated reduction of GHG emissions are not quantifiable. Because of this, the City cannot state with certainty whether implementation of the General Plan Update would meet the 2030 and 2045 community emissions targets.

Overall, the proposed Project would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions, as described above. While compliance with relevant regulations and implementation of the proposed General Plan Updates' goals, policies and actions would reduce GHG emissions, the associated reductions of GHG emissions are not quantifiable. Therefore, it cannot be guaranteed that the implementation of the General Plan Update, as well as the individual development projects associated with implementation of the proposed Project, would generate emissions consistent with the State's long-term goals for reducing GHG emissions in the State of California, particularly the net-zero target as promulgated under AB 1279. As such, the City cannot state with certainty whether implementation of the General Plan Update would meet the State's community emissions target. The proposed Project would have a cumulatively significant and unavoidable adverse impact in regards to greenhouse gas emissions.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2 **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.4: **Commercial Corridors.** Encourage development of well-maintained, functional, and appropriate commercial, retail, and employment opportunities in stand-alone and mixed-use formats, particularly along Hawthorne Boulevard, major arterials, and at major intersections where there is maximum visibility and access.

MOBILITY ELEMENT

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: **Multimodal Connectivity.** Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-5.1 **Transit Use.** Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2 **Improve Local Public Transit Services.** Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: **Transit Facilities.** Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Action M-5a Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Policy M-6.1: **Bicycle Master Plan.** Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: **Local Travel Network.** Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.3: **Hawthorne Boulevard Sidewalks.** Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.

Policy M-6.4: **Sidewalk and Bikeway Gaps.** Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: **Bicycle/Pedestrian Facilities at New Developments.** Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: **Effects of New Technologies on Active Transportation.** Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b Implement the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaced, as funding allows.

Action M-6c Review and update the City's Municipal Code, as necessary to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.2: **Transportation Demand Management.** Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3 **Regional Coordination.** Encourage regional agencies such as Metro, South Coast Air Quality Management District (SCQAMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4 **New Development.** Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Goal RM-4: **Air Quality and Greenhouse Gas Emissions.** Improved air quality in Lawndale and the region through reductions in air pollutants and greenhouse gas (GHG) emissions.

Policy RM-4.1: **Regional Cooperation**. Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: **Measurement and Enforcement**. Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: **GHG Emissions.** Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: **Transportation Options**. Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability**. Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.7: **Sensitive Receptors.** Insulate sensitive receptors from areas of heightened air quality pollution by utilizing land use planning to buffer and protect residential areas.

Policy RM-4.8: **Mitigation.** Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: **GHG Reduction.** Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: **Public Engagement**. Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate

Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NO_X emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.

- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Goal RM-5: **Energy Resources.** A community that safely manages its energy resources.

Policy RM-5.1: **Compliance with State Legislation.** Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: **Green Building Standards Code.** Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: **Renewable Energy.** Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: **Energy-Efficient Materials.** Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: **Energy Conservation.** Promote energy conservation and recycling by the public and private sectors.

Policy RM-5.6: **Energy Needs.** Collaborate with local service providers in determining and meeting the needs of the community for energy in clean, modern, and cost-effective ways.

Policy RM-5.7: **Business Community.** Support the decisions of the Lawndale business community as they select and implement the most appropriate, financially feasible, and responsible energy source for their individual operations.

Policy RM-5.8: **Public Education.** Promote public education programs that advocate for reducing energy consumption, and promote renewable sources of energy.

Policy RM-5.9: **Promote Energy Conservation in Existing Building Stock.** Promote energy conservation by residents and businesses in existing structures, in close coordination with other agencies and local energy providers.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through State programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant Unavoidable Impact.

5.8.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for greenhouse gas emissions would be similar for the region and for projects within the City.

Would the Project, combined with other related cumulative projects, generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis: The topic of GHG emissions is inherently a cumulative impact. Though significance thresholds can be developed by air districts, as well as State and Federal regulatory agencies, these thresholds and their related goals are ultimately designed to effect change at a global level. As demonstrated in the analysis provided above, it cannot be guaranteed that the proposed Project would be consistent with the 2045 GHG target for the State of California and would therefore have a significant and unavoidable impact, even with the implementation of General Plan Update goals, policies and actions.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: There is no feasible mitigation available for this impact.

Level of Significance: Significant Unavoidable Impact.

5.8.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the General Plan Update would result in significant unavoidable GHG impacts.

If the City approves the proposed General Plan Update, the City will be required to make findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations for consideration by the City's decisionmakers in accordance with Section 15093 of the CEQA Guidelines.

5.8.8 REFERENCES

Alta Planning + Design, *South Bay Bicycle Master Plan: Draft Final Plan*, August 2011.

Atkins, *City of Lawndale Energy Efficiency Climate Action Plan,* December 2015.

California Air Resources Board (CARB), *California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators*, https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf, July 2021, accessed May 1, 2023.

California Climate Change Assessment, *California's Fourth Climate Change Assessment*, 2019.

California Energy Commission (CEC), *2022 Building Energy Efficiency Standards Summary*, August 2021.

South Bay Cities Council of Governments, *City of Lawndale Climate Action Plan*, December 2017.

U.S. Department of State, *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*, November 2021.

U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009*, April 2011.

U.S. Environmental Protection Agency, *Climate Change and Extreme Heat, What You Can Do to Prepare*, October 2016.

U.S. Green Building Council, *Press Room: Benefits of Green Building*, https://www.usgbc.org/press/benefits-of-green-building, accessed May 1, 2023.

United States Geological Survey (USGS), *Disappearing Beaches: Modeling Shoreline Change in Southern California*, https://www.usgs.gov/programs/cmhrp/news/disappearing-beaches-modeling-shoreline-change-southern-california, May 2017, accessed May 1, 2023.

This page intentionally left blank.

5.9 HAZARDS AND HAZARDOUS MATERIALS

5.9.1 PURPOSE

This section identifies existing hazards and hazardous materials sites within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

For the purpose of this analysis, the term "hazardous material" refers to both hazardous substances and hazardous waste. A material is defined as "hazardous" if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as "hazardous" by such an agency. A "hazardous waste" is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity). Other hazards, such as potential airport-related safety hazards for people residing/working in the Planning Area, interference with an adopted emergency response plan, and exposure of people/structures to risk involving wildland fires, are also addressed in this section.

5.9.2 ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS AND WASTE

Hazardous Materials

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health and safety, or the environment when improperly treated, stored, transported, or disposed of. Hazardous materials are mainly present because of industries involving chemical byproducts from manufacturing, petrochemicals, and hazardous building materials.

Hazardous Waste

Hazardous waste is the subset of hazardous materials that have been abandoned, discarded, or recycled and is not properly contained, including contaminated soil or groundwater with concentrations of chemicals, infectious agents, or toxic elements sufficiently high to increase human mortality or to destroy the ecological environment. If a hazardous material is spilled and cannot be effectively picked up and used as a product, it is considered to be hazardous waste. If a hazardous material site is unused, and it is obvious there is no realistic intent to use the material, it is also considered to be a hazardous waste. Examples of hazardous materials include flammable and combustible materials, corrosives, explosives, oxidizers, poisons, materials that react violently with water, radioactive materials, and chemicals.

Transportation of Hazardous Materials

The transportation of hazardous materials within California is subject to various Federal, State, and local regulations. The City has no direct authority to regulate the transport of hazardous materials on State highways or rail lines. Transportation of hazardous materials by truck and rail is regulated by the U.S.

Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit delivery, or the loading of such materials (California Vehicle Code Section 31602(b), 32104(a)). The California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

HAZARDOUS SITES

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act (CEQA) requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to develop at least annually an updated Cortese List. The DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

The Cortese List is comprised of information from the following:

EnviroStor Data Management System

The California Department of Toxic Substances Control (DTSC) maintains the EnviroStor Data Management System, which provides information on hazardous waste facilities (both permitted and corrective action) as well as any available site cleanup information. This site cleanup information includes: Federal Superfund Sites (NPL), State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Corrective Action Sites, Tiered Permit Sites, and Evaluation/Investigation Sites. The hazardous waste facilities include: Permitted–Operating, Post-Closure Permitted, and Historical Non-Operating.

There are four site locations with an address in the Planning Area listed in the EnviroStor database (DTSC 2023a). Of these, one site has a listed cleanup status of No Action (AM Transportation, 15309 Fonthill Avenue); one site has a listed cleanup status of No Further Action (Smith Elementary School, 14609 Grevillea Avenue); and two sites have a listed cleanup status of “Refer: 1248 Local Agency” (Cashman Property, 15201-15211 Hawthorne Boulevard; Classic Cleaners/South Bay Place, 4427 Redondo Beach Boulevard). A “No Action” determination is made for sites where a screening (e.g., Phase I Environmental Site Assessment) resulted in no “recognized environmental conditions” existing that would warrant further investigation. A “No Further Action” determination is made for sites where field sampling analysis demonstrated that the site poses no significant risk to human health or the environment. The two sites with a Referral status are described further below.

The first referral site is the location of the Cashman Property located at 15201-15211 Hawthorne Boulevard. The Cashman Property site was identified as of August 15, 2002 and is listed as “Evaluation” with cause of contamination not specified. The site has since been developed with a Smart & Final Extra and other retail/restaurant uses. The second referral site is the location of Classic Cleaners/South Bay Place located at 4427 Redondo Beach Boulevard. The Classic Cleaners/South Bay Place site was identified as of February 2, 2000 and is listed as “Evaluation” with cause of contamination not specified. Tenant

space was formerly occupied by a dry cleaner, which had received notification of the action. According to an SB 1248 Notification for the site dated January 27, 2000, a remedial action agreement with the responsible party was proposed and the Los Angeles County Fire Department (LACoFD) provided local oversight.

GeoTracker

GeoTracker is the California State Water Resource Control Board's (SWRCB's) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program).

There are 27 locations within the Planning Area that are listed in the GeoTracker database for Leaking Underground Storage Tanks (LUST). Table 5.9-1, *Geotracker Database Sites*, lists the site name for LUSTs in the Planning Area, and the status of each site. As shown in Table 5.9-1, the vast majority of LUST sites in the Planning Area have a status of Completed – Case Closed. However, three locations have open cases undergoing remediation.

Table 5.9-1
GeoTracker Database Sites

Site Name	Address	Status
76 #7252 Former/Thrifty #256	4015 Redondo Beach Boulevard	Completed - Case Closed
Arco #5107	16518 Hawthorne Boulevard	Open - Site Remediation
Arco #5107	16518 Hawthorne Boulevard	Completed - Case Closed
Arco #6164	5350 Rosecrans Avenue	Completed - Case Closed
Chevron #9-5760 (Former)	15733 Hawthorne Boulevard	Completed - Case Closed
City Of Lawndale Public Works Dept.	4722 Manhattan Beach Boulevard	Completed - Case Closed
E & F Arco	15922 Inglewood Avenue	Open - Site Remediation
Econo Lube N' Tune #20	15312 Hawthorne Boulevard	Completed - Case Closed
Exxon #7-3051 (Former)	15736 Hawthorne Boulevard	Completed - Case Closed
Exxon #7-3363	15606 Inglewood Avenue	Completed - Case Closed
Exxon #7-3363 Former	15606 Inglewood Avenue	Completed - Case Closed
Former Arco # 09651/Former Thrifty #257	16515 Hawthorne Boulevard	Open - Site Remediation
Former Exxon #7-3696	14305 Hawthorne Boulevard	Completed - Case Closed
Galleria Carwash (Former)	17111 Hawthorne Boulevard	Completed - Case Closed
Lawndale Carwash	17111 Hawthorne Boulevard	Completed - Case Closed
Los Angeles County Road Division 232	4055 West Marine Avenue	Completed - Case Closed
P & M #911 (Auto Max)	15407 Hawthorne Boulevard	Completed - Case Closed
Rich-Lawndale LLC	15211 Hawthorne Boulevard	Completed - Case Closed
Shell #204-4236-0101 (Former)	15808 Inglewood Boulevard	Completed - Case Closed
Shell #204-4236-0200	15106 Hawthorne Boulevard	Completed - Case Closed
Stadler & Jenson Moving	15611 Condon Avenue	Completed - Case Closed
Standard Oil Station (Former)	4749 Artesia Boulevard	Completed - Case Closed
Thrifty #257	16515 Hawthorne Boulevard	Completed - Case Closed

Table 5.9-1 (continued)
GeoTracker Database Sites

Site Name	Address	Status
Tosco - 76 Station #3859	4008 Rosecrans Avenue	Completed - Case Closed
United Oil #4	16926 Hawthorne Boulevard	Completed - Case Closed
Westwood Bldg Materials Co	15708 Inglewood Avenue	Completed - Case Closed
Westwood Bldg Materials Co	15708 Inglewood Avenue	Completed - Case Closed
Source: California Water Resources Control Board, *Geotracker*, 2023.		

Solid Waste Information System (SWIS)

The Solid Waste Information System (SWIS) is a database of solid waste facilities that is maintained by California's Department of Resources Recycling and Recovery (CalRecycle). The SWIS database identifies active, planned and closed sites. There is one facility listed in the SWIS database located within the Planning Area (CalRecycle 2023). The facility is a Limited Volume Transfer Operation (Solid Waste Operation class) located at 4055 Marine Avenue, which is a facility for Los Angeles County's Road Maintenance Division. The site is active and handles mixed municipal, construction/demolition, and green materials waste generated by Los Angeles County operations.

HAZARDS FROM AIR TRAFFIC

In Los Angeles County, the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission (ALUC) and for coordinating the airport planning of public agencies within the County (Los Angeles County ALUC 2004). ALUC is required to adopt airport land use compatibility plans to protect and promote the safety and welfare of airport users and residents in the airport vicinity. Specifically, these plans seek to protect the public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public use airports. ALUC is also concerned with airport activities which may adversely affect adjacent areas and nearby land use which may interfere with airport operations.

There are several public, private, and military airports that operate within Los Angeles County. The nearest airports to Lawndale are the Hawthorne Municipal Airport and the Los Angeles International Airport (LAX). According to the Los Angeles County ALUC, Lawndale is not located within the Hawthorne Municipal Airport Influence Area or the LAX Airport Influence Area. Furthermore, the National Transportation Safety Board (NTSB) Aviation Accident Database does not identify any historical aircraft accidents in Lawndale (NTSB 2023).

Regional Airport Facilities

Los Angeles International Airport (LAX): LAX is located in the City of Los Angeles, approximately 2.5 miles northwest of the City of Lawndale. It is the primary international airport serving Los Angeles and its surrounding metropolitan area. LAX is owned by the City of Los Angeles and operated by the airport authority Los Angeles World Airports (LAWA). In 2004, the LAX Master Plan was adopted in order to

address the pressing need for modernization and improved levels of service, as well as the demand for increased security. The LAX Master Plan sets forth land use compatibility policies that are intended to ensure that future land uses in the surrounding area will be compatible with potential long-range aircraft activities at the airport, and that the public's exposure to safety hazards and noise impacts are minimized.

Hawthorne Municipal Airport: Hawthorne Municipal Airport, also known as Jack Northrop Field, is an FAA-designated general aviation reliever airport owned by the City of Hawthorne. The airport is located approximately 1.5 miles northeast of the City of Lawndale, adjacent to the 105 Freeway.

Compton/Woodly Airport: The Compton/Woodly Airport is a public use general aviation airport owned and operated by the County of Los Angeles. The airport is located approximately 5 miles east of Lawndale in the City of Compton.

Torrance Municipal Airport/Zamperini Field: Torrance Municipal Airport, also known as Zamperini Field, is a general aviation airport owned and operated by the City of Torrance. The airport is located approximately 4.5 miles south of Lawndale in the City of Torrance.

Santa Monica Airport: Santa Monica Municipal Airport is a general aviation airport in the City of Santa Monica, approximately 10 miles northwest of Lawndale.

Long Beach Airport (LGB): Long Beach Airport is located in the City of Long Beach. This airport is categorized as a primary commercial service airport by the National Plan of Integrated Airport Systems. The Long Beach Airport is approximately 11 miles southeast of Lawndale.

Hollywood Burbank Airport (BUR): Hollywood Burbank Airport is located in Burbank, California, northwest of downtown Los Angeles and approximately 21 miles north of Lawndale. It is limited to a small number of passenger airlines and serves the greater Los Angeles area, including the San Fernando and San Gabriel Valleys.

John Wayne Airport (SNA): John Wayne Airport is located to the southwest of the Planning Area, in the city of Santa Ana, in the northern part of Orange County. It offers limited international service. The National Plan of Integrated Airport Systems categorizes this airport as a primary commercial service airport, since it has over 10,000 passenger boardings per year. The John Wayne Airport is approximately 31 miles southeast of Lawndale.

OTHER POTENTIAL HAZARDS

Wildland Fire Hazards

The State has charged the California Department of Forestry and Fire Protection (CAL FIRE) with the identification of Fire Hazard Severity Zones (FHSZ) within State Responsibility Areas (SRA). In addition, CAL FIRE must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas (LRA). The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards. According to Los Angeles County's and CAL FIRE's FHSZ maps, there are no FHSZs in LRA or SRA within the Planning Area (Los Angeles County 2023; CAL FIRE 2023). This topic is discussed in detail in Section 5.20, *Wildfire* of this EIR.

Asbestos-Containing Materials (ACM)

Asbestos, a natural fiber used in the manufacturing of different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) asbestos-containing materials (ACM) were banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials, however, were not banned completely. The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of ACM is likely in some structures.

Lead-Based Paint

Lead-based paint has been identified by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and the Department of Housing and Urban Development (HUD) as a potential health risk to humans, particularly children, based on its effects to the central nervous system, kidneys, and bloodstream. The risk of lead-based paint has been classified by HUD based upon the age and condition of the painted surface. The Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint is likely in some structures.

EMERGENCY RESPONSE

The General Plan Public Safety Element establishes goals and policies specific to emergency preparedness. The overall goal for emergency preparedness is to improve the ability of the City to respond effectively to natural and human-caused emergencies. This includes through implementation of plans and programs that directly relate to the goals of the Public Safety Element, such as the City of Lawndale all-hazards Emergency Operations Plan.

The City of Lawndale Emergency Operations Plan (EOP) was adopted in 2011 and updated in 2015. The EOP addresses the City's planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City's emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). The EOP also describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support.

5.9.3 REGULATORY SETTING

FEDERAL

Aviation Act of 1958

The Federal Aviation Act resulted in the creation of the Federal Aviation Administration (FAA). The FAA is charged with the creation and maintenance of a National Airspace System.

Federal Aviation Regulations (CFR, Title 14)

The Federal Aviation Regulation establish regulations related to aircraft, aeronautics, and inspection and permitting.

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

Clean Water Act

The Clean Water Act (CWA), which amended the Water Pollution Control Act (WPCA) of 1972, sets forth the Section 404 program to regulate the discharge of dredged and fill material into Waters of the United States and the Section 402 National Pollutant Discharge Elimination System (NPDES) to regulate the discharge of pollutants into Waters of the United States. The Section 401 Water Quality Certification program establishes a framework of water quality protection for activities requiring a variety of Federal permits and approvals (including CWA Section 404, CWA Section 402, Federal Energy Regulatory Commission Hydropower and Section 10 of the Rivers and Harbors Act).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active Federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous material releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Environmental Protection Agency

The primary regulator of hazards and hazardous materials is the EPA, whose mission is to protect human health and the environment. The City of Lawndale is located within EPA Region 9, which includes Arizona, California, Hawaii, and New Mexico.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (DOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.

Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act authorizes the U.S. Department of Transportation Office of Pipeline Safety to regulate pipeline transportation of natural (flammable, toxic, or corrosive) gas and other gases

as well as the transportation and storage of liquefied natural gas. The Office of Pipeline Safety regulates the design, construction, inspection, testing, operation, and maintenance of pipeline facilities. While the Federal government is primarily responsible for developing, issuing, and enforcing pipeline safety regulations, the pipeline safety statutes provide for State assumption of the intrastate regulatory, inspection, and enforcement responsibilities under an annual certification. To qualify for certification, a state must adopt the minimum Federal regulations and may adopt additional or more stringent regulations as long as they are not incompatible.

Resource Conservation and Recovery Act

This act established EPA's "cradle to grave" control (generation, transportation, treatment, storage and disposal) over hazardous materials and wastes. In California, the DTSC has RCRA authorization.

STATE

Airport Land Use Commission Law (Public Utilities Code Section 21670 et seq.)

The law, passed in 1967, authorized the creation of ALUCs in California. Per the Public Utilities Code, the purpose of an ALUC is to protect public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimizes exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses (Public Utilities Code Section 21670). Furthermore, each ALUC must prepare an Airport Land Use Compatibility Plan (ALUCP). Each ALUCP, which must be based on a twenty-year planning horizon, should focus on broadly defined noise and safety impacts.

Assembly Bill 337

Per AB 337, local fire prevention authorities and CAL FIRE are required to identify VHFHSZ in LRA. Standards related to brush clearance and the use of fire-resistant materials in FHSZ are also established.

California Code of Regulations

Title 3 of the California Code of Regulations (CCR) pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, the weather, the treated lands and all surrounding properties. Title 3 prohibits any application that would:

- Contaminate persons not involved in the application;
- Damage non-target crops or animals or any other public or private property; and
- Contaminate public or private property or create health hazards on said property.

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste.

Title 26 of the CCR is a combination of State regulations pertaining to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Finally, staff training standards are set forth in Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the state's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Department of Transportation

Caltrans has adopted policy and guidelines relating to traffic noise as outlined in the Traffic Noise Analysis Protocol (Caltrans 2020). The noise abatement criteria specified in the protocol are the same as those specified by the Federal Highway Administration (FHWA).

California Government Code Section 65302

This section, which establishes standards for developing and updating General Plans, includes fire hazard assessment and Safety Element content requirements.

California Health and Safety Code

Division 11 of the Health and Safety Code establishes regulations related to a variety of explosive substances and devices, including high explosives and fireworks. Section 12000 et seq. establishes regulations related to explosives and explosive devices, including permitting, handling, storage, and transport (in quantities greater than 1,000 pounds).

Division 12 establishes requirements for buildings used by the public, including essential services buildings, earthquake hazard mitigation technologies, school buildings, and postsecondary buildings. Section 13000 et seq. establishes State fire regulations and broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

Division 20 establishes DTSC authority and sets forth hazardous waste and underground storage tank regulations. In addition, the division creates a state superfund framework that mirrors the Federal program.

Division 26 establishes California Air Resources Board (CARB) authority. The division designates CARB as the air pollution control agency per Federal regulations and charges the Board with meeting Clean Air Act requirements.

California Vehicle Code Section 31600 (Transportation of Explosives)

This code establishes requirements related to the transportation of explosives in quantities greater than 1,000 pounds, including licensing and route identification.

California Public Resources Code

The State's Fire Safety Regulations are set forth in Public Resources Code Section 4290, which include the establishment of SRA.

Public Resources Code Section 4291 sets forth defensible space requirements, which are applicable to anyone who "…owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material" (Section 4291(a)).

Food and Agriculture Code

Division 6 of the California Food and Agriculture Code establishes pesticide application regulations. The division establishes training standards for pilots conducting aerial applications as well as permitting and certification requirements.

State Oversight of Hazards and Hazardous Materials

The DTSC is primarily responsible for regulating the handling, use, and disposal of toxic materials. The SWRCB regulates discharge of potentially hazardous materials to waterways and aquifers and administers the basin plans for groundwater resources in the various regions of the state. The Regional Water Quality Control Board (RWQCB) oversees surface and groundwater. Programs intended to protect workers from exposure to hazardous materials and from accidental upset are covered under OSHA at the Federal and state level (Cal OSHA) and the California Department of Health Services (DHS) at the state level. Air quality is regulated through CARB and the South Coast Air Quality Management District (SCAQMD). The State Fire Marshal is responsible for the protection of life and property through the development and application of fire prevention engineering, education, and enforcement; CAL FIRE provides fire protection services for State and privately-owned wildlands.

Water Code

Division 7 of the California Water Code, commonly referred to as the Porter-Cologne Water Quality Control Act, created the SWRCB and the RWQCB. In addition, water quality responsibilities are established for the SWRCB and RWQCBs.

LOCAL

South Coast Air Quality Management District (SCAQMD) Rule 1403

The purpose of SCAQMD's Rule 1403 is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste

materials (ACWM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

Certified Unified Program Agency

The Certified Unified Program Agencies (CUPA) consolidates, coordinates, and makes consistent hazardous materials and hazardous waste programs (program elements). The Los Angeles County Fire Department (LACoFD) Health Hazardous Materials Division is the CUPA within Los Angeles County, including the City of Lawndale (LACoFD 2023). The Health Hazardous Materials Division administers the following programs:

- Hazardous Waste Generator Program;
- Hazardous Materials Release Response Plans and Inventory Program;
- California Accidental Release Prevention Program;
- Aboveground Storage Tank Program; and
- Underground Storage Tank Program.

The mission of the LACoFD Health Hazardous Materials Division is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, enforcement, site mitigation oversight, and emergency response. The Health Hazardous Materials Division provides 24-hour emergency services in response to hazardous materials spills or releases and abandonment.

Los Angeles County Department of Public Health, Environmental Health Division

The Los Angeles County Department of Public Health, Environmental Health Division is responsible for the enforcement and education of Federal, State, and local laws and regulations relating to environmental factors which affect public health and safety. The Environmental Health Division is made up of five branches, including District Surveillance and Enforcement, Specialized Surveillance and Enforcement, Environmental Protection, Toxicology and Environmental Assessment, and Division Support.

Los Angeles County Operational Area Emergency Response Plan

The purpose of the Los Angeles County Operational Area Emergency Response Plan (OAERP) is to increase cooperation and coordination between relevant governmental agencies and jurisdictions in order to increase efficiency and minimize losses in the event of an emergency or disaster. The OAERP established the Operational Area (OA) emergency organization, identifies departmental responsibilities, and specifies policies and general procedures for addressing emergencies impacting the OA. This Plan provides for the coordination of emergency operations plans of agencies and jurisdictions. The OAERP conforms to the requirements of the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS).

County of Los Angeles All-Hazard Mitigation Plan (AHMP)

The 2020 County of Los Angeles All-Hazard Mitigation Plan (AHMP) conforms to the requirements of Federal Emergency Management Agency (FEMA) Disaster Mitigation Act of 2000. The 2020 AHMP replaces the AHMP that was approved in 2014. The County developed the 2020 AHMP to cover mitigation responsibilities of County departments (including LACoFD). It helps ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency.

Los Angeles County Airport Comprehensive Land Use Plan

The Los Angeles County Airport Comprehensive Land Use Plan (ACLUP) was originally adopted in 1991 and revised in 2004. The purpose of the ACLUP is to protect the public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public use airports. The basic function of the County ACLUP is to promote compatibility between airports and the land uses that surround them. It establishes policies applicable to land use compatibility planning for the areas surrounding airports in the County.

City of Lawndale Local Hazard Mitigation Plan (LHMP)

The City adopted the LHMP in 2016 to assess natural hazard risk and incorporate mitigation strategies to reduce the potential impact from hazards. It complies with the Federal Disaster Mitigation Act (2000), and Federal Register 44 CFR Parts 201 and 206. The City's Emergency Preparedness Coordinator managed preparation of the LHMP in cooperation with the City's other departments, community stakeholders, partner jurisdictions, agencies and organizations, and members of the public.

City of Lawndale Emergency Operations Plan (EOP)

The City adopted the EOP in 2011, which was updated in 2015. The EOP addresses the City's planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City's emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). The EOP also describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support.

City of Lawndale Municipal Code

Lawndale Municipal Code Chapter 2.44, *Disaster Council*, provides for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations and affected private persons.

Municipal Code Chapter 8.16*, Hazards Generally*, adopts and incorporates the General Hazards Ordinance of the County of Los Angeles (Los Angeles County Ordinance No. 96-0017) as the general hazards code of the City.

Municipal Code Chapter 8.28, *Solid Waste – Collection and Management*, establishes protocols for the proper collection and disposal of solid waste, including hazardous materials.

Municipal Code Chapter 10.50, *Truck Routes*, establishes designated truck routes for the primary use of commercial truck traffic through the City of Lawndale, specifically designated for use by licensed vehicles exceeding ten-thousand-pound gross weight.

Municipal Code Title 13, *Public Services*, addresses wastewater and storm drains within the City. Chapter 13.04, *Sanitary Sewers and Industrial Waste* Code, adopts Title 20, Division 2 of the Los Angeles County Code as the Sanitary Sewer and Industrial Waste Ordinance for the City of Lawndale. The ordinance regulates discharges of wastewater, including industrial waste discharges, into sanitary sewers within the City. Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, establishes stormwater runoff controls and best management practices (BMPs) to prevent and/or reduce the quantity of pollutants from being discharged into the Municipal Separate Storm Sewer System (MS4).

Municipal Code Title 15, *Buildings and Construction*, adopts various uniform building and construction codes and safety precautions, including the California Building Code, the California Residential Code, the California Plumbing Code, the California Electrical Code, the California Mechanical Code, and the California Green Building Standards Code. Chapter 15.20, *Fire Code*, adopts and incorporates the California Fire Code, as amended by Title 32 the Los Angeles County Fire Code, for the purpose of prescribing regulations governing the creation and maintenance of conditions dangerous to life and property due to hazards of fire and explosions. The Fire Code sets fire safety related building standards and practices to safeguard life and property.

Section 17.36.220, *Temporary Storage of Construction Materials*, and Section 17.36.230, *Temporary Storage- City Construction Materials and Other Public Agency Construction Materials*, regulate construction materials and equipment. Particularly, Section 17.36.220 requires construction activities to keep adjacent sidewalks, public streets, and, alleys, to be kept free of trash, dirt, debris, or other material for the duration of the construction, as well as sixty days following substantial completion of such construction. Section 17.36.230 allows property in any zone to be used for the storage of materials, equipment and/or for a contractor's temporary office for any city construction project and/or other public agency construction projects.

5.9.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to hazards and hazardous materials. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (refer to Impact Statement HAZ-1);
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (refer to Impact Statement HAZ-2);
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to Impact Statement HAZ-3);

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment (refer to refer to Impact Statement HAZ-4);
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area (refer to Impact Statement HAZ-5);
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement HAZ-6); and/or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (refer to Impact Statement (HAZ-7).

5.9.5 IMPACTS AND MITIGATION MEASURES

HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis: Many types of businesses utilize various chemicals and hazardous materials, and their routine business operations involve chemicals that are manufactured, warehoused, or transported. Implementation of the General Plan Update would accommodate the future development of both residential and non-residential uses within the Planning Area. Increased development could result in an increase in the routine transport, use, and storage of hazardous materials in the City, potentially resulting in accidental releases. Risk of upset can involve scenarios that could adversely affect the public or the environment through accidental release of hazardous materials. Exposure of persons to hazardous materials could also occur through the operations of future developments associated with the improper handling of hazardous materials/wastes, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. Typical incidents that could create a hazard involve accidental releases of hazardous materials including accidents during transport causing a “spill” of a hazardous materials and/or natural disasters causing the unauthorized release of a substance. Situated at the hub of a major arterial traffic network, the City of Lawndale is susceptible to hazardous materials spills. If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water, and groundwater, in addition to any toxic vapors that might be generated. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

The use, transportation, and disposal of hazardous materials is regulated and monitored by local fire departments, CUPAs, Cal OSHA, and the DTSC consistent with the requirements of Federal, State, and local regulations and policies. Facilities that store hazardous materials on-site are required to maintain a Hazardous Materials Business Plan in accordance with State regulations. In the event of an accidental release of hazardous materials, the local CUPA (i.e., LACoFD Health Hazardous Materials Division) and emergency management agencies (e.g., Los Angeles County Sheriff’s Department and LACoFD) would respond. All future projects allowed under the General Plan Update would be required to comply with the provisions of Federal, State, and local requirements related to hazardous materials. As future

development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with hazardous materials as required under CEQA.

In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and actions to address potential impacts associated with hazardous materials among other issues. Proposed Mobility Element Policy M-7.1 directs the City to maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads. Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 encourages the City to educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c protects the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

The proposed Resource Management Element Policy RM-2.3 promotes the proper disposal of hazardous waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal. These General Plan Update policies and actions would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and

State regulations regarding the use, transport, storage, and disposal of hazardous materials. The General Plan Update also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance. Policy PS-1.3 requires the implementation emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.5 directs the City to support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1b directs the City to implement and update (as necessary) the City's EOP.

As described previously, hazardous materials regulations related to the use, handling, and transport of hazardous materials are codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in the California Health and Safety Code. These laws were established at the State level to ensure compliance with Federal regulations to reduce the risk to human health and the environment from the routine use of hazardous substances. These regulations must be implemented by employers/businesses, as appropriate, and are monitored by the State (e.g., Cal OSHA in the workplace or DTSC for hazardous waste) and/or the County. The haulers and users of hazardous materials are listed with and regulated and monitored by the DTSC, LACoFD Health Hazardous Materials Division, and County of Los Angeles Department of Public Health, Environmental Health Division. Compliance with the requirements of Federal, State, and local laws and regulations regarding the use and storage of hazardous materials would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with implementation of the General Plan Update would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

MOBILITY ELEMENT

Policy M-7.1: **Local Truck Routes.** Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: **Hazardous Waste.** Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-1: **Emergency Operations.** A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.1: **Citywide Safety.** Support projects, programs, policies, and regulations that help to mitigate potential impacts associated with natural and man-made hazards.

Policy PS-1.2: **Critical Facilities.** Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: **Emergency Preparedness and Response.** Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: **Local Hazard Mitigation.** Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Policy PS-1.6: **Emergency Access.** Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-1.7: **Public Safety Education.** Promote public safety education programs to educate on emergency preparedness, reduce accidents, injuries, and fires, and to train members of the public to respond to emergencies.

Policy PS-1.8: **Cooperation.** Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

Action PS-1a: Regularly review and coordinate emergency response procedures with Los Angeles County and State emergency response procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Action PS-1c: Continue to implement and update (at least every five years) the City's Local Hazard Mitigation Plan.

Action PS-1d: Coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Action PS-1f: Promote after school programs, volunteer programs, and Business and Neighborhood Watch programs to help maintain a safe environment.

Goal PS-3: **Hazardous Materials.** A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: **Compatible Land Uses.** Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: **Safe Residential Uses.** Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: **Emergency Operations.** Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: **Cleanup Sites.** Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: **Monitoring.** Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: **Transportation.** Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: **Pipelines.** Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: **Rail Lines.** Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: **Public Education.** Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZ-2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis:

Short-Term Construction-Related Accidental Release of Hazardous Materials

The General Plan Update would enable development of new residential and non-residential uses within the Planning Area. Construction activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment.

Demolition

Specific development projects have not been identified as part of the General Plan Update. However, future development accommodated through implementation of the General Plan Update could involve the demolition of existing structures and buildings as areas within the City are redeveloped. As discussed above, the Planning Area includes existing development from and prior to the 1960s; therefore, the presence of lead-based paint, ACM, and/or other contaminants, which are typically present in buildings and structures constructed prior to 1978, are likely present in some structures. All demolition that could result in the release of ACMs or lead-based paint would be conducted according to Federal and State regulations which govern the renovation and demolition of structures where ACMs and lead-based paint are present. The National Emission Standards for Hazardous Air Pollutants mandates that building owners conduct an asbestos survey to determine the presence of ACMs prior to the commencement of any remedial work, including demolition. In accordance with SCAQMD Rule 1403, if ACM material is found, abatement of asbestos would be required prior to any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional in accordance with California Code of Regulations Title 8, Section 1532.1. If lead-based paint is found, abatement would be required to be completed by a qualified Lead Specialist prior to any demolition activities. Compliance with existing regulations related to ACM and lead-based paint would reduce potential impacts to a less than significant level.

Soil and Groundwater Contamination in Unknown Contaminated Sites

Future development accommodated through implementation of the General Plan Update could involve grading and excavation activities which could expose construction workers and the public to previously unknown hazardous substances present in the soil or groundwater. Exposure to contaminants could occur if the contaminants migrated to surrounding areas or if contaminated zones were disturbed at the contaminated location. Grading and excavation activities could also reveal previously unidentified underground storage tanks. Although underground storage tank removal activities could pose risks to workers and the public, potential risks would be minimized by managing the tank removal according to existing LACoFD Health Hazardous Materials Division standards. Potential impacts to groundwater would be dependent upon the type of contaminant, the amount released, and depth to groundwater at the time of the release.

The public could also be exposed to hazardous materials if new development or redevelopment were to be located on a current or historical hazardous material site. There are no active hazardous waste facilities cleanup sites within the Planning Area listed in the EnviroStor database. There are three open LUST sites undergoing remediation within the Planning Area. Future development associated with implementation of the General Plan Update would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB.

In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and actions to address potential impacts associated with potentially contaminated sites. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Compliance with General Plan Update goals, policies, and actions, and existing regulations would reduce potential impacts involving the release of hazardous materials into the environment as a result of on-site contamination to a less than significant level.

Long-Term Operations-Related Accidental Release of Hazardous Materials

Long-term operational activities associated with new development could result in upset and/or accident conditions involving the release of hazardous materials into the environment. The General Plan Update does not propose site-specific development; thus, specific hazardous materials that could be accidentally released cannot be predicted at this time. Typical incidents that could occur due to the accidental release of hazardous materials include leaking underground storage tanks, spills during transport, pipeline rupture, inappropriate storage or use, and/or natural disasters.

If not cleaned up immediately and completely, these and other types of incidents could cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. Depending on the nature and extent of the contamination, groundwater supplies could become unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

The transport, storage, and handling of hazardous materials by developers, contractors, business owners, and others are required to comply with Federal, State, and local regulations during project construction and operation. Facilities that use hazardous materials are required to obtain permits from the EPA under the RCRA, which gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, the hazardous materials regulations included in Federal law govern the transportation of hazardous materials. Locally, the LACoFD Health Hazardous Materials Division is the CUPA for Los Angeles County and is responsible for consolidating, coordinating, and making consistent the administrative requirements, permits, inspections, and enforcement activities of State standards regarding the transportation, use, and disposal of hazardous materials in Los Angeles County, including the Planning Area.

The General Plan Update includes policies and actions to address potential accidental exposure of individuals as a consequence of unknown existing environmental contaminants. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 coordinates with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 encourages the City

to educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. Proposed Resource Management Element Policy RM-2.3 promotes the proper disposal of hazardous waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal. Mobility Element Policy M-7.1 directs the City to maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads. Compliance with all applicable Federal, State, and local laws related to the transport, storage, and handling of hazardous materials would reduce the likelihood and severity of accidents, and impacts involving the release of hazardous materials into the environment would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

MOBILITY ELEMENT

Policy M-7.1: **Local Truck Routes.** Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: **Hazardous Waste.** Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-3: **Hazardous Materials.** A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: **Compatible Land Uses.** Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: **Safe Residential Uses.** Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: **Emergency Operations.** Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: **Cleanup Sites.** Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: **Monitoring.** Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: **Transportation.** Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: **Pipelines.** Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: **Rail Lines.** Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: **Public Education.** Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's

website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis: The Planning Area is served by a variety of preschools, elementary, middle, and high schools; refer to Section 5.15, *Public Services*, of this EIR. As noted above, future development under the General Plan Update could utilize, transport, store, or dispose of hazardous materials during construction or operation. Excavation and grading activities associated with future development could expose the public to unknown hazardous materials present in soil or groundwater, which would require remediation activities. Remediation, if any, would include potential transport of hazardous materials to an approved landfill facility. As a result, future development within the Planning Area could potentially emit or handle hazardous materials within one-quarter mile of an existing or proposed school.

CEQA Guidelines Section 15186, *School Facilities*, requires that school projects, as well as projects proposed to be located near schools, examine potential health impacts resulting from exposure to hazardous materials, wastes, and substances. Furthermore, permitting requirements for individual hazardous material handlers or emitters would require evaluation and notification where potential hazardous materials handling and emissions could occur in proximity to existing schools.

In addition to the requirements associated with Federal, State, and local regulations, the General Plan Update includes policies and actions to address potential impacts associated with hazardous materials. Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Policy PS-3.6 promotes the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibits the parking of vehicles transporting hazardous materials on City streets. Policy PS-3.7 requires new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the

greatest extent possible. Policy PS-3.8 directs the City to coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail. Policy PS-3.9 educates residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Action PS-3d directs the City to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home, and to provide informational materials about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline. Mobility Element Action M-7a directs the City to review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City. Implementation of the safety procedures and regulations mandated by applicable Federal, State, and local laws and the General Plan Update policies and actions would ensure that potential risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes in proximity to a school associated with implementation of the General Plan Update would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

MOBILITY ELEMENT

Policy M-7.1: **Local Truck Routes.** Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.3: **Hazardous Waste.** Promote the proper disposal of hazardous waste, including paint, tires, medications, medical sharps, infectious waste, asbestos waste, construction waste, and electronic waste through education, monitoring, and enforcement of proper use, storage, handling, and disposal.

PUBLIC SAFETY ELEMENT

Goal PS-3: **Hazardous Materials.** A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: **Compatible Land Uses.** Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: **Safe Residential Uses.** Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: **Emergency Operations.** Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: **Cleanup Sites.** Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: **Monitoring.** Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Policy PS-3.6: **Transportation.** Promote the routing of vehicles transporting hazardous materials to transportation corridors posing the minimum risk to the public and prohibit the parking of vehicles transporting hazardous materials on City streets.

Policy PS-3.7: **Pipelines.** Require new pipelines or other similar facilities that would transport hazardous materials to avoid residential areas to the greatest extent possible.

Policy PS-3.8: **Rail Lines.** Coordinate with Metro and Burlington Northern and Santa Fe Rail (BNSF) on opportunities to maintain and improve the safety of the transport of hazardous materials by rail.

Policy PS-3.9: **Public Education.** Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products as well as appropriate disposal methods.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Action PS-3d: Continue to work with the Los Angeles County Public Works Department to implement and advertise the Household Hazardous Waste Collection Program to protect residents from dangers resulting from the use, transport, and disposal of hazardous materials used in the home. Provide informational materials at public locations and links on the City's website about the County's Household Hazardous Waste Collection program, collection facilities, drop-off centers, and the 24-hour Household Hazardous Waste hotline.

Action PS-3e: Continue to coordinate with the California Department of Conservation Division of Oil, Gas, and Geothermal Resources for any development proposed to occur near oil wells.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: There are no active hazardous waste facilities cleanup sites within the Planning Area listed in the EnviroStor database. There are three open LUST sites undergoing remediation within the Planning Area. Additionally, the Planning Area contains one active facility listed in the SWIS database, a Limited Volume Transfer Operation that handles mixed municipal, construction/demolition, and green materials waste. Future development associated with implementation of the General Plan Update would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the DTSC and the Los Angeles RWQCB prior to construction. These sites comprise the Cortese list, compiled pursuant to Government Code Section 65962.5.

Although site-specific development is not currently proposed, there is the potential that future development associated with implementation of the proposed Project could occur on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 at that time. It is noted that for two of the three LUST sites currently undergoing remediation (16515 Hawthorne Boulevard and 16518 Hawthorne Boulevard), the proposed Project would change the parcels' underlying land use designation from Commercial to Hawthorne Boulevard Specific Plan (HBSP). The HBSP designation is anticipated to accommodate mixed-use development and has the potential to introduce residential uses to these sites. Future site-specific development would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB. Development would be required to comply with the proposed General Plan Update, which includes policies and actions to address potential impacts associated with hazardous materials sites. Proposed Public Safety Element Policy PS-3.1 requires land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses. Policy PS-3.2 discourages the development of residential uses adjacent to

or near potentially hazardous land uses. Policy PS-3.3 directs the City to coordinate with Los Angeles County to review and update, as appropriate, the County's EOP Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City. Policy PS-3.4 requires that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe. Policy PS-3.5 directs the City to monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials. Action PS-3a requires, as part of the development review process, projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level. Action PS-3b requires the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD. Action PS-3c requires the protection of the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals. Compliance with General Plan Update goals, policies, and actions, and existing regulations would reduce potential impacts involving the hazardous materials sites.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-3: **Hazardous Materials.** A community protected from the harmful effects of hazardous materials, hazardous waste, and environmental contamination.

Policy PS-3.1: **Compatible Land Uses.** Require land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials be located and operated in a way to reduce risk to neighboring land uses.

Policy PS-3.2: **Safe Residential Uses.** Discourage the development of residential uses adjacent to or near potentially hazardous land uses.

Policy PS-3.3: **Emergency Operations.** Coordinate with Los Angeles County to review and update, as appropriate, the County's Emergency Operations Plan Hazardous Materials Annex so that the Plan adequately addresses and responds to potential hazardous materials incidents within the City.

Policy PS-3.4: **Cleanup Sites.** Require that developers coordinate with the Los Angeles Department of Public Health, Environmental Health Division and the LACoFD to confirm that hazardous waste cleanup sites located within the City are remediated by the property owner in a manner that keeps the public safe.

Policy PS-3.5: **Monitoring.** Monitor through the planning and business permit processes the operations of businesses and individuals that handle hazardous materials.

Action PS-3a: As part of the development review process, require projects that result in significant risks associated with hazardous materials to include measures to address the risks and reduce the risks to an acceptable level.

Action PS-3b: Require the submittal of information regarding hazardous materials manufacturing, storage, use, transport, and/or disposal by existing and proposed businesses and developments to LACoFD.

Action PS-3c: Protect the community from hazards related to air pollution, hazardous materials, and ground and air transportation by requiring feasible mitigation to be incorporated into new development and redevelopment proposals to address safety impacts associated with those proposals.

Mitigation Measures: No mitigation measures are required

Level of Significance: Less Than Significant Impact.

HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Impact Analysis: There are no airports within the Planning Area. The closest airports to the Planning Area are the Hawthorne Municipal Airport, located approximately 1.5 miles to the northeast, and LAX, located approximately 2.5 miles to the northwest. According to the Los Angeles County ALUC, Lawndale is not located within the Hawthorne Municipal Airport Influence Area or the LAX Airport Influence Area. While the Planning Area is within two miles of a public use airport, it is not within the area identified in an airport land use plan as being adversely affected (i.e., within the Airport Influence Area). As such, impacts with regard to safety hazards to people residing or working in the Planning Area would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions: There are no General Plan Update goals, policies, or actions specific to airports.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZ-6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The General Plan Update would allow a variety of new residential and non-residential development, which would result in increased jobs and population in the Planning Area. The County OAERP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Los Angeles County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. The EOP does not provide a specific evacuation route map, as evacuation

measures would be implemented based on the specific emergency and area affected. The General Plan Update incorporates the City's EOP by reference into the City of Lawndale's Public Safety Element.

The General Plan Update identifies major arterials as the primary routes for evacuation; however, evacuation routes would depend upon the emergency event and area affected. The General Plan Update includes policies and actions to address emergency response and evacuation. Proposed Public Safety Element Policy PS-1.3 requires the implementation emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.5 encourages the support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1b directs the City to implement and update (as necessary) the City's EOP.

The General Plan Update does not include any site-specific development. However, Project implementation would allow for increased development in the City, resulting in an increase in population. Although the Planning Area is highly urbanized and existing infrastructure, including roads, are generally in place, road and infrastructure improvements could occur to accommodate the new growth as further discussed in Section 5.17, *Transportation*. Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, *Temporary Storage of Construction Materials*, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion of such construction. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review the proposed development for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the Fire Department would ensure that construction and operation of future projects associated with implementation of the General Plan Update would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Primary access to all major roads would be maintained during construction of future developments within the Planning Area. As part of the site plan and design review process, future development projects would be reviewed for adequate infrastructure and access as well as consistency with adopted emergency and evacuation plans among many other environmental issues in order to ensure the safety of City residents and the physical environment. Therefore, impacts associated with adopted emergency response or evacuation plans would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Emergency Operations.** A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.1: **Citywide Safety.** Support projects, programs, policies, and regulations that help to mitigate potential impacts associated with natural and man-made hazards.

Policy PS-1.2: **Critical Facilities.** Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: **Emergency Preparedness and Response.** Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: **Local Hazard Mitigation.** Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Policy PS-1.6: **Emergency Access.** Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-1.7: **Public Safety Education.** Promote public safety education programs to educate on emergency preparedness, reduce accidents, injuries, and fires, and to train members of the public to respond to emergencies.

Policy PS-1.8: **Cooperation.** Collaborate with the school district, businesses, nonprofit organizations, and community members/groups to maintain safety throughout the City.

Action PS-1a: Regularly review and coordinate emergency response procedures with Los Angeles County and State emergency response procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Action PS-1c: Continue to implement and update (at least every five years) the City's Local Hazard Mitigation Plan.

Action PS-1d: Coordinate with local agencies and organizations to develop and distribute informational brochures and give presentations to civic groups and local schools to educate residents and businesses about appropriate actions to take during an emergency situation.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Action PS-1f: Promote after school programs, volunteer programs, and Business and Neighborhood Watch programs to help maintain a safe environment.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact Analysis: The potential for wildland fires represents a hazard to people and structures, particularly within areas adjacent to open space or within close proximity to wildland fuels. As described in Section 5.20, *Wildfire*, the Planning Area is not located within a FHSZ in SRA or LRA. The Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas.

The General Plan Update Public Safety Element includes goals and policies to address public safety and emergency services, including fire protection services. Proposed Public Safety Element Policy PS-4.1 directs the City to coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Action PS-4a requires all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Future development allowed under the General Plan Update would be required to comply with the provisions of Federal, State, and local requirements related to wildland fire hazards, including State fire safety regulations associated with wildland-urban interfaces, fire-safe building standards, and defensible space requirements. As future development and infrastructure projects are considered by the City, each project would be evaluated for potential impacts, specific to the project, associated with wildland fire hazards as required under CEQA. Therefore, through compliance with existing Federal, State, and local laws and regulations related to wildland fire hazards and implementation of the General Plan Update goals, policies, and actions, impact regarding the exposure of people or structures to significant loss, injury, or death involving wildland fires would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-4: **Fire Hazards.** A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: **Fire Protection Services.** Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.3: **Emergency Access.** Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

Policy PS-4.4: **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Policy PS-4.5: **Hazard Mitigation Plans.** Coordinate with local, State, and Federal agencies to update emergency, evacuation, and hazard mitigation plans, as necessary.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Action PS-4b: Work with LACoFD to disseminate educational programs for residents on fire hazard risks and fire safety measures.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to hazards and hazardous materials may occur. The geographic setting for hazards and hazardous materials are typically localized and considers development within the City.

Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis: Construction activities associated with future development and development associated with the cumulative projects may involve the routine transport, use, or disposal of hazardous materials. However, the construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law.

Implementation of the Project would result in new development and intensification of existing urban uses along major corridors, including Hawthorne Boulevard. The majority of growth is expected to occur within the Hawthorne Boulevard Specific Plan area, which would accommodate primarily mixed-use

development including residential and commercial uses. The General Plan Update does not introduce new industrial uses or allow for the intensification of existing industrial uses. The land uses anticipated by the Project and cumulative development projects do not typically involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. Adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations, which would ensure that risks involving the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes would be less than significant. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions described above would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects involving hazards associated with the routine transport, use, or disposal of hazardous materials would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Impact Analysis: Future development sites associated with implementation of the Project and cumulative development sites within the City could create a significant hazard to the public or the environment through upset and accident conditions involving the release of hazardous materials into the environment. Implementation of construction activities associated with Project implementation and cumulative development projects would involve some demolition, mass grading, excavation, and other ground-disturbing activities that could temporarily create a significant hazard to the public or the environment through release of hazardous materials. Future site-specific development would be reviewed at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities that may occur on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of the regulatory agencies, such as DTSC and the Los Angeles RWQCB. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions described above would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects

involving hazards associated with the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis Future development sites associated with implementation of the Project and cumulative development sites within the City may emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school during construction phases. All future use, storage, transport, and disposal of hazardous materials associated with the proposed Project and cumulative projects within the City and region would be would be governed by existing regulations of several agencies, including DTSC, EPA, U.S. DOT, Cal/OSHA, and the LACoFD Health Hazardous Materials Division. Site-specific development would adhere to standard construction practices to ensure that any hazardous materials released are appropriately contained and remediated as required by local, State, and Federal law. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. All development within the City is required to adhere to existing regulations which ensure compliance with safety standards related to the use and storage of hazardous materials, and the safety procedures mandated by applicable Federal, State, and local laws and regulations would reduce potential impacts to schools within the area. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions described above would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Thus, the Project's incremental effects involving emission of hazardous materials within a one-quarter mile of a school would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact Analysis: Future development associated with implementation of the Project and cumulative projects would be evaluated at the project-level to determine whether any development sites are listed on a hazardous materials site. Any development activities occurring on documented hazardous materials sites would be required to undergo remediation and cleanup under the supervision of Federal, State, and local regulations, including the DTSC and the Los Angeles RWQCB, prior to construction. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to hazards and hazardous materials. Implementation of the General Plan Update policies and actions described above would reduce potential impacts to ensure the General Plan Update would not considerably contribute to significant hazards to the public. Therefore, the Project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving hazardous materials sites would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: Future development associated with Project implementation and cumulative development could impair implementation of or physically interfere with an adopted emergency response plan. Implementation of construction activities associated with Project implementation and cumulative development projects would involve some land clearing, mass grading, and other construction activities that could temporarily interfere with emergency response plans or emergency evacuation plans. Major arterials within the City generally serve as the primary routes for evacuation. However, evacuation routes would depend upon the emergency event and location. While all residential developments currently meet City evacuation standards, the City would continue to coordinate with LACoFD and the County Sheriff to provide ongoing education to residents about how to safely evacuate in the event of an emergency.

As site-specific development is not currently proposed, it is unknown if implementation of the Project would involve the removal of existing driveways or the construction of new driveways or any associated improvements, such as curb, gutter, and sidewalks. Proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the LACoFD would ensure that construction and operation would not impair implementation of or physically interfere with the City's EOP or emergency evacuation plan. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions and adopted regulations pertaining to emergency response and evacuation.

Thus, the Project's incremental effects involving interface of emergency plans would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, combined with other related cumulative projects, result in significant cumulative impacts with respect to wildfire?

Impact Analysis: The Project's incremental contribution to cumulative wildfire hazard impacts would not be significant. As previously discussed, the City is highly urbanized and future development and redevelopment activities in the City would occur in areas that have been previously developed. As a result, the degree of wildland fire hazard, including secondary hazards such as post-fire flooding and debris flow, would not substantially change with adoption of the General Plan Update, and current hazards would not significantly increase.

As described previously, there are no SRA or FHSZs mapped within the Planning Area. New development would be required to comply with the Fire Code and would be reviewed by LACoFD to ensure fire safety is addressed. Additionally, the General Plan includes policies and programs to address public safety and emergency services, including fire protection. Accordingly, the Project's incremental contribution to cumulative wildfire impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hazards and hazardous materials impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable hazards and hazardous materials impacts would occur as a result of the General Plan Update.

5.9.8 REFERENCES

California Department of Forestry and Fire Protection (CAL FIRE), FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/, accessed March 7, 2023.

California Department of Resources Recycling and Recovery (CalRecycle), SWIS Facility/Site Search, https://www2.calrecycle.ca.gov/SolidWaste/Site/Search, accessed March 6, 2023.

California Department of Toxic Substances Control (DTSC), *EnviroStor Site / Facility Search*, https://www.envirostor.dtsc.ca.gov/public/search?basic=True, accessed March 6, 2023a.

California Department of Toxic Substances Control (DTSC), *EnviroStor: Cashman Property (19650042)*, https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19650042, accessed March 6, 2023b.

California Department of Toxic Substances Control (DTSC), *EnviroStor: Classic Cleaners/Southbay Place (19720047)*, https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=19720047, accessed March 6, 2023c.

California Environmental Protection Agency (CalEPA), *Cortese List Data Resources*, https://calepa.ca.gov/sitecleanup/corteselist/, accessed March 6, 2023.

California State Water Resources Control Board, *Geotracker: Project Search Results*, https://geotracker.waterboards.ca.gov/search, accessed March 6, 2023.

Los Angeles County, *Fire Hazard Severity Zone Web App*, https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=d2ea45d15c784adfa601e84b38060c4e, accessed March 7, 2023.

Los Angeles County Airport Land Use Commission (ALUC), *Los Angeles County Airport Land Use Plan*, December 2004.

Los Angeles County Fire Department (LACoFD), *Health Hazardous Materials Division*, https://fire.lacounty.gov/health-hazardous-materials-division/, accessed March 7, 2023.

National Transportation Safety Board (NTSB), *CAROL Query*, https://data.ntsb.gov/carol-main-public/basic-search, accessed March 7, 2023.

5.10 HYDROLOGY AND WATER QUALITY

5.10.1 PURPOSE

This section provides a discussion of the regional hydrology, flooding, water quality, water purveyors, and water sources in the City of Lawndale and provides an analysis of potential impacts associated with implementation of the General Plan Update.

KEY TERMS

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is naturally replenished through precipitation, but is naturally lost through evaporation and seepage into soil.

5.10.2 ENVIRONMENTAL SETTING

REGIONAL HYDROLOGY

The City of Lawndale is located within the southwestern portion of Los Angeles County, California. The rivers and streams of the Los Angeles region flow from headwaters in the Transverse and Peninsular Mountain ranges located to the north and east of Lawndale, through urbanized foothill, valley, and coastal areas, and terminate at highly utilized recreational beaches and harbors (Los Angeles Regional Water Quality Control Board 2014). Historically, the Los Angeles region's surface-area hydrology consisted of a network of rivers, ephemeral streams, wetlands, and swamp land; however, the construction of dams, flood control projects, and urbanization have significantly altered the natural hydrology of the region.

The City has a relatively flat topography with an elevation of approximately 59 feet above sea level. Drainages from the City ultimately flow into the Pacific Ocean at the Los Angeles and Long Beach Harbors, located approximately nine miles southeast of the City. Historically, the harbor area consisted of marshes and mudflats with a large marshy area, Dominguez Slough, to the north of the harbors, and flow from the Los Angeles River entered where Dominguez Channel now drains (Los Angeles Regional Water Quality Control Board 2023). During the late 19th and early 20th centuries, the landscape was highly altered; channels were dredged, marshes were filled, wharves were constructed, the Los Angeles River was diverted, and a breakwater was constructed in order to allow deep draft ships to be directly offloaded and products be swiftly moved. The Dominguez Slough was completely channelized and the greater San Pedro Bay was dredged and enclosed by two more breakwaters. The Los Angeles/Long Beach Harbor complex is now one of the largest ports in the country.

WATERSHEDS

A watershed is a region that is bound by a divide that drains to a common watercourse or body of water. Watersheds serve an important biological function, oftentimes supporting an abundance of aquatic and terrestrial wildlife including special status species and anadromous and native local fisheries. Watersheds provide conditions necessary for riparian habitat.

Watersheds are delineated by the United States Geological Survey (USGS) using a nationwide system based on surface hydrologic features (United States Geological Survey 2023). These hydrologic units are classified into four levels (regions, subregions, accounting units, and cataloging units), with each unit being identified by a unique hydrologic unit code (HUC) based on its level within the hierarchical system. This means that boundaries are defined according to size and topography, with multiple sub-watersheds within larger watersheds. The USGS system divides the United States into regions (HUC-2), subregions (HUC-4), basins (HUC-6), subbasins (HUC-8), watersheds (HUC-10), and sub-watersheds (HUC-12).

Level 2 – Subregion (HUC-4)

The City of Lawndale is located within the Southern California Coastal subregion, also known as the South Coast Hydrologic Region, a large coastal watershed in southern California (California Department of Water Resources 2003). The South Coast Hydrologic Region spans approximately 6.78 million acres and is bounded on the west by the Pacific Ocean, on the north by the Transverse Ranges, on the east by the Colorado River Hydrologic Region, and on the south by the international boundary with Mexico.

Level 4 – Subbasin (HUC-8)

Within the South Coast Hydrologic Region, the City is located within the San Gabriel hydrologic subbasin. The Los Angeles Regional Water Quality Control Board (RWQCB) governs basin planning and water quality within the San Gabriel hydrologic subbasin. Figure 5.10-1, *Hydrologic Units: Subbasin*, shows hydrologic subbasins within and surrounding the City.

Level 5 – Watershed (HUC-10)

Within the San Gabriel hydrologic subbasin, the City is located within the Dominguez Channel watershed. Figure 5.10-2, *Hydrologic Units: Watershed*, shows watersheds within and surrounding the Planning Area.

Level 6 – Sub-Watershed (HUC-12)

There are two sub-watersheds within the Dominguez Channel watershed: the Upper Dominguez Channel and Lower Dominguez Channel sub-watersheds. The Planning Area is located entirely in the Lower Dominguez Channel sub-watershed.

SURFACE WATER AND FLOOD CONTROL FACILITIES

The Planning Area lies within the Dominguez Channel Watershed Management Area (WMA), which encompasses approximately 133 square miles of land and water. The Dominguez Channel WMA is comprised of three sub-watershed drainage areas: the Upper Dominguez Channel, Lower Dominguez Channel and Estuary, and the Los Angeles and Long Beach Harbors including Machado Lake (Dominguez Channel Watershed Management Area Group 2014). The sub-watersheds drain primarily via an extensive network of underground storm drains and flood control channels, including the Dominguez Channel, a

15.7-mile-long waterway that begins in Hawthorne and drains into the Los Angeles and Long Beach Harbors (Los Angeles County Flood Control District 2015). The Dominguez Channel WMA is a fully built-out area with a high percentage of impervious area. While the Dominguez Channel does not run through the City of Lawndale, a segment of the lined portion of the Dominguez Channel above Vermont Avenue runs in a southerly direction through the Sphere of Influence (SOI), east of City limits. There are no other surface waterbodies within the Planning Area.

Storm Drain Facilities

Storm drain infrastructure in the City is jointly owned and operated by the City and County. The Los Angeles County Flood Control District (LACFCD) provides flood control services and drainage infrastructure within unincorporated County areas and 86 incorporated cities, including the City of Lawndale (Los Angeles County Flood Control District 2023). LACFCD maintains a network of catch basins, storm drains, laterals, and the Dominguez Channel to convey stormwater out of the Planning Area and eventually discharge to the Pacific Ocean via Los Angeles Harbor. The City owns and maintains a number of smaller catch basins, storm drains, and laterals that directly flow into the LACFCD system, eventually discharging into the Pacific Ocean via Los Angeles Harbor. The existing County and City storm drain infrastructure is discussed further in Section 5.19, *Utilities and Service Systems*.

Surface Water Quality

Surface water quality is affected by point source and non-point source pollutants. Point source pollutants are those emitted at a specific point, such as a pipe, while non-point source pollutants are typically generated by surface runoff from diffuse sources, such as streets, paved areas, and landscaped areas. Point source pollutants are controlled with pollutant discharge regulations or Waste Discharge Requirements (WDRs). Non-point source pollutants are more difficult to monitor and control although they are important contributors to surface water quality in urban areas.

Stormwater runoff pollutants vary based on land use, topography, the amount of impervious surface, and the amount and frequency of rainfall and irrigation practices. Runoff in developed areas typically contains oil, grease, and metals accumulated in streets, driveways, parking lots, and rooftops, as well as pesticides, herbicides, particulate matter, nutrients, animal waste, and other oxygen-demanding substances from landscaped areas. The highest pollutant concentrations usually occur at the beginning of the wet season during the “first flush.”

Water quality in the City is governed by the Los Angeles RWQCB, which sets water quality standards in the Water Quality Control Plan Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses.

The Clean Water Act (CWA) 303(d) list is a register of impaired and threatened waters which the CWA requires all states to submit for Environmental Protection Agency approval. The list identifies all waters where the required pollution control measures have so far been unsuccessful in reaching or maintaining the required water quality standards. Waters that are listed are known as “impaired.” All waterbodies on the 303(d) list are subject to the development of a total maximum daily load (TMDL). A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, non-point

sources, and natural background conditions (including an appropriate margin of safety), without exceeding its water quality standard.

The Planning Area's surface water resources include the Dominguez Channel (lined portion above Vermont Avenue). According to the California State Water Resources Control Board (SWRCB) 303(d) list (Final 2014/2016 list), the Dominguez Channel (lined portion above Vermont Avenue) is listed as a Category 5 water body, meaning that it is a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for the segment (California State Water Resources Control Board 2023). Impairments for the portion of the Dominguez Channel above Vermont Avenue include the following: Copper, Indicator Bacteria, Lead, Toxicity, and Zinc. According to the Basin Plan, the major point sources of organo-chlorine pesticides, polychlorinated biphenyls (PCBs), and metals into Dominguez Channel are stormwater and urban runoff discharges. Nonpoint sources include atmospheric deposition and fluxes from contaminated sediments into the overlying water (Los Angeles Regional Water Quality Control Board 2019).

According to the Basin Plan, beneficial uses of the Dominguez Channel (Estuary to 135th Street) are municipal and domestic water supply, warm freshwater habitat, and wildlife habitat, and existing beneficial uses are rare, threatened, or endangered species (Los Angeles Regional Water Quality Control Board 2019).

GROUNDWATER

The Planning Area is underlain by the West Coast Subbasin (West Coast Basin) of the Coastal Plain of Los Angeles Basin. The West Coast Basin covers 142 square miles and is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River; on the east by the Newport-Inglewood fault zone; and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills (California Department of Water Resources 2003). According to the Golden State Water Company (GSWC) Southwest Service Area 2020 Urban Water Management Plan (UWMP), the most productive aquifers within the West Coast Basin are the Gardena and Gage aquifers in the Lakewood Formation and the Silverado, Lynwood, and the unnamed aquifers in the San Pedro Formation (Golden State Water Company 2021). The Gardena and Gage aquifers are comprised primarily of fine to coarse sand and gravel and have a total maximum thickness of 320 feet. Wells completed in the Gage aquifer typically produce water at rates ranging from 100 to 1,300 gallons per minute (gpm). The aquifers within the San Pedro formation are comprised of coarse sand, gravel, and sandy gravel and have a combined maximum thickness of 1,200 to 1,400 feet. The Silverado aquifer, underlying most of the West Coast Basin, is the most productive aquifer in the West Coast Basin, yielding approximately 80 to 90 percent of the groundwater extracted annually.

Natural recharge to the West Coast Basin's groundwater supply is mostly underflow from the Central Basin, through the Newport-Inglewood fault zone (Golden State Water Company 2021). Injection wells in the West Coast Basin create mounds of freshwater that help protect the West Coast Basin from seawater intrusion. Other minor sources of recharge include percolation of precipitation, irrigation return flow from fields and lawns, and other applied surface waters. The storage capacity of the primary water producing aquifer, the Silverado aquifer, is estimated by the California Department of Water Resources (DWR) to be

about 6,500,000 acre-feet. Groundwater levels have risen approximately thirty feet since the West Coast Basin was adjudicated in 1961.

Although the City overlies the West Coast Basin, water delivered to GSWC's Southwest Service Area is a blend of groundwater pumped from the West Coast Basin and Central Basin groundwater systems, as well as imported water. Groundwater supplies constitute a major component of GSWC Southwest's water supply portfolio. GSWC Southwest uses adjudicated groundwater supplies from both basins for use in its service area. According to GSWC's UWMP, both the Central Basin and West Coast Basin groundwater systems have been thoroughly analyzed and both are meticulously monitored through each adjudication's requirements. As noted above, the West Coast Basin was adjudicated in 1961; the Central Basin was adjudicated in 1965. The West Coast Basin Adjudication and Central Basin Adjudication limit the volumes of water that each party may extract from the respective basin. This limit is referred to as the Allowed Pumping Allocation (APA). The APA is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Watermaster is charged with not only developing the APA but also monitoring and reporting the basins' conditions in order to ensure groundwater overdraft and sea water intrusion do not occur.

FLOODPLAIN MAPPING

The Planning Area is built out and fully developed. The Planning Area is largely paved which reduces infiltration and increases surface runoff, and can increase the risk of localized flooding. Localized flooding may occur in low spots or where infrastructure is unable to accommodate peak flows during a storm event. In most cases, localized flooding dissipates quickly after heavy rain ceases.

FEMA Flood Zones

The Federal Emergency Management Agency (FEMA) has a database that maps flood potential across the United States. FEMA mapping provides important guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). The FEMA FIRM for the Planning Area is shown on Figure 5.10-3, *FEMA Flood Map* (note that for mapping purposes, FEMA flood zones have been categorized into 100- and 500-year flood zones). As shown, there are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard.

Tsunami

A tsunami is a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The City is approximately three miles from the Pacific Ocean and is not located with a mapped Tsunami Hazard Area (California Department of Conservation 2023).

Dam Inundation

Earthquakes centered close to a dam are typically the most likely cause of dam failure. Dam inundation maps have been required in California since 1972, following the 1971 San Fernando Earthquake and near failure of the Lower Van Norman Dam. There are no dams with the potential to inundate portions of the City according to the Division of Safety of Dams Dam Breach Inundation Maps (California Department of Water Resources 2023).

5.10.3 REGULATORY SETTING

There are a number of regulatory agencies whose responsibility includes the oversight of the water resources of the state and nation including the Federal Emergency Management Agency (FEMA), the U.S. Environmental Protection Agency (EPA), the State Water Resources Board, and the Regional Water Quality Control Board (RWQCB). The following is an overview of the Federal, State and local regulations that are applicable to the proposed project.

FEDERAL

Clean Water Act

The Clean Water Act (CWA), initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The CWA establishes the basic structure for regulating the discharges of pollutants into the waters of the United States and gives the Environmental Protection Agency (EPA) the authority to implement pollution control programs. The statute's goal is to regulate all discharges into the nation's waters and to restore, maintain, and preserve the integrity of those waters. The CWA sets water quality standards for all contaminants in surface waters and mandates permits for wastewater and stormwater discharges.

The CWA also requires states to establish site-specific water quality standards for navigable bodies of water and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The following CWA sections assist in ensuring water quality for the water of the United States:

- CWA Section 208 requires the use of best management practices (BMPs) to control the discharge of pollutants in stormwater during construction;
- CWA Section 303(d) requires the creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies; and preparation of plans to improve the quality of these water bodies. CWA Section 303(d) also establishes Total Maximum Daily Loads (TMDLs), which is the maximum amount of a pollutant that a water body can receive and still safely meet water quality standard; and
- CWA Section 404 authorizes the U.S. Army Corps of Engineers to require permits that will discharge dredge or fill materials into waters in the United States, including wetlands.

In California, the EPA has designated the SWRCB and its nine RWQCBs with the authority to identify beneficial uses and adopt applicable water quality objectives.

The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits).

Federal Emergency Management Agency

FEMA's primary mission is to reduce the loss of life and property and protect from all hazards, including flooding, among others. FEMA advises on building codes and flood plain management; teaches people how to get through a disaster; helps equip local and State emergency preparedness; coordinates the Federal response to a disaster; makes disaster assistance available to states, communities, businesses and individuals; trains emergency managers; supports the nation's fire service; and administers the national flood and crime insurance programs.

Flood is a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties. The term "100-year flood" is defined by FEMA, as the flood elevation that has a one percent chance of being equaled or exceeded each year. A "500-year flood" is one which has a 0.2 percent chance of occurring each year. A 500-year flood event would be slightly deeper and cover a greater area than a 100-year flood event.

Flood zones are geographic areas that FEMA defines, based on studies of flood risk. The zone boundaries are shown on flood hazard maps, also called Flood Insurance Rate Maps (FIRM). High Risk Zones or Special Flood Hazard Areas (SFHA or Zone A) are high-risk flood areas where special flood, mudflow, or flood-related erosion hazards exist, and flood insurance is mandatory. SFHAs are those areas subject to inundation by a 100-year flood. Low-to-Moderate Risk Zones or Non-Special Flood Hazard Areas (Zones B, C, X) are areas that are not in any immediate danger from flooding caused by overflowing rivers or hard rains. Insurance purchase is not required in these zones.

FEMA is responsible for administering the National Flood Insurance Program (NFIP), which enables property owners in participating communities to purchase insurance as protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. In communities that participate in the NFIP, mandatory flood insurance purchase requirements apply to all Zones A, which are communities subject to a 100-year flood event. In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the nation's floodplains on FIRMs.

FEMA is mandated by the Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to evaluate flood hazards and provide FIRMs for local and regional planners to further promote safe floodplain development. Flood risk data presented on FIRMs are based on historic, hydrologic, hydraulic, and meteorological data, as well as flood control works, open-space conditions, and development. To prepare a FIRM that illustrates the extent of flood hazards in flood-prone communities, FEMA conducts an engineering study referred to as Flood Insurance Study. Using information collected in these studies, FEMA engineers and cartographers delineate SFHAs on FIRMs.

Flood Control Act

The Flood Control Act (1917) established survey and cost estimate requirements for flood hazards in the Sacramento Valley. All levees and structures constructed per the Act were to be maintained locally but controlled Federally. All rights of way necessary for the construction of flood control infrastructure were to be provided to the Federal government at no cost.

Federal involvement in the construction of flood control infrastructure, primarily dams and levees, became more pronounced upon passage of the Flood Control Act of 1936.

Flood Disaster Protection Act

The Flood Disaster Protection Act (FDPA) of 1973 was a response to the shortcomings of the NFIP, which were experienced during the flood season of 1972. The FDPA prohibited Federal assistance, including acquisition, construction, and financial assistance, within delineated floodplains in non-participating NFIP communities. Furthermore, all Federal agencies and/or Federally insured and Federally regulated lenders must require flood insurance for all acquisitions or developments in designated SFHAs in communities that participate in the NFIP.

Improvements, construction, and developments within SFHAs are generally subject to the following standards:

- All new construction and substantial improvements of residential buildings must have the lowest floor (including basement) elevated to or above the base flood elevation (BFE).
- All new construction and substantial improvements of non-residential buildings must either have the lowest floor (including basement) elevated to or above the BFE or dry-floodproofed to the BFE.
- Buildings can be elevated to or above the BFE using fill, or they can be elevated on extended foundation walls or other enclosure walls, on piles, or on columns.
- Extended foundation or other enclosure walls must be designed and constructed to withstand hydrostatic pressure and be constructed with flood-resistant materials and contain openings that will permit the automatic entry and exit of floodwaters. Any enclosed area below the BFE can only be used for the parking of vehicles, building access, or storage.

National Flood Insurance Program (NFIP)

Per the National Flood Insurance Act of 1968, the NFIP has three fundamental purposes: better indemnify individuals for flood losses through insurance; reduce future flood damages through State and community floodplain management regulations; and reduce Federal expenditures for disaster assistance and flood control.

While the Act provided for subsidized flood insurance for existing structures, the provision of flood insurance by FEMA became contingent on the adoption of floodplain regulations at the local level.

National Pollutant Discharge Elimination System (NPDES)

NPDES permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and

storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the EPA, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the CWA and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the CWA's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also WDRs issued under the authority of the CWA.

NPDES permitting authority is administered by the SWRCB and its nine RWQCBs. The Planning Area is in a watershed administered by the Santa Ana RWQCB.

Individual projects in the City that disturb more than one acre would be required to obtain NPDES coverage under the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) describing BMPs the discharger would use to prevent and retain storm water runoff. The SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a waterbody listed on the 303(d) list for sediment.

Rivers and Harbors Appropriation Act of 1899

One of the Country's first environmental laws, this Act established a regulatory program to address activities that could affect navigation in Waters of the United States.

Water Pollution Control Act of 1972

The Water Pollution Control Act established a program to regulate activities that result in the discharge of pollutants to waters of the United States.

STATE

California Fish and Wildlife Code

The California Department of Fish and Wildlife (CDFW) protects streams, water bodies, and riparian corridors through the streambed alteration agreement process under Section 1600 to 1616 of the California Fish and Game Code. The California Fish and Game Code establishes that "an entity may not substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river stream, or lake" (Fish and Game Code Section 1602(a)) without notifying the CDFW, incorporating necessary mitigation and obtaining a streambed alteration agreement. The CDFWs jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminants levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

California Government Code

Relevant sections of the California Government Code are identified below.

Section 65302: Revised safety elements must include maps of any 200-year flood plains and levee protection zones within the Planning Area.

Section 65584.04: Any land having inadequate flood protection, as determined by FEMA or DWR, must be excluded from land identified as suitable for urban development within the Planning Area.

Section 8589.4: California Government Code Section 8589.4, commonly referred to as the Potential Flooding-Dam Inundation Act, requires owners of dams to prepare maps showing potential inundation areas in the event of dam failure. A dam failure inundation zone is different from a flood hazard zone under the NFIP. NFIP flood zones are areas along streams or coasts where storm flooding is possible from a 100-year flood. In contrast, a dam failure inundation zone is the area downstream from a dam that could be flooded in the event of dam failure due to an earthquake or other catastrophe. Dam failure inundation maps are reviewed and approved by the California Office of Emergency Services. Sellers of real estate within inundation zones are required to disclose this information to prospective buyers.

California Department of Health Services

The Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for Methyl *tertiary*-butyl ether and other oxygenates.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and

groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

State Water Resources Control Board (State Water Board) Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management and evolve the Storm Water Program by: a) developing guiding principles to serve as the foundation of the storm water program; b) identifying issues that support or inhibit the program from aligning with the guiding principles; and c) proposing and prioritizing projects that the Water Boards could implement to address those issues.

The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt overdraft and bring basins into balanced levels of pumping and recharge. With passage of the SGMA, the Department of Water Resources (DWR) launched the Sustainable Groundwater Management Program to implement the law and provide ongoing support to local agencies around the State. The SGMA:

- Establishes a definition of "sustainable groundwater management;"
- Requires that a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California;
- Establishes a timetable for adoption of Groundwater Sustainability Plans;
- Empowers local agencies to manage basins sustainably;
- Establishes basic requirements for Groundwater Sustainability Plans; and
- Provides for a limited State role.

SGMA requires local agencies to form groundwater sustainability agencies (GSAs) for the high and medium priority basins. GSAs develop and implement groundwater sustainability plans (GSPs) for non-adjudicated areas; a GSP is not required for adjudicated areas. However, if an adjudicated action has determined the rights to extract groundwater for only a portion of a basin, then the requirement for a GSP applies to the non-adjudicated portion. DWR evaluates GSPs to determine if they comply with SGMA, substantially comply with the GSP Regulations, and whether implementation of the GSP is likely to achieve the sustainability goal for the basin. DWR's evaluation and assessment is based on criteria outlined in the GSP Regulations. For an adjudicated area, or the portion of the basin subject to the adjudication, the

watermaster or a local agency for the adjudicated area, is required to submit to DWR on an annual basis, a report containing information to the extent available regarding groundwater elevation data; groundwater extraction data, surface water used or available for groundwater recharge; total water use; change in groundwater storage; and the annual report submitted to the court.

The West Coast Basin was designated a very low priority basin in DWR's 2019 SGMA Basin Prioritization report (Department of Water Resources 2020).

LOCAL

Water Quality Control Plan (Basin Plan) for the Los Angeles Region

A Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The Basin Plan is a resource for the Regional Board and others who use water and/or discharge wastewater in the region that the Basin Plan is designed to cover. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

The Los Angeles Region (Region 4) has jurisdiction over the coastal drainages between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties covers coastal Los Angeles County, including the Planning Area. The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. Water quality objectives, as defined by the CWA Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." The State has developed TMDLs that are a calculation of the maximum amount of a pollutant that a water body can have and still meet water quality objectives established by the region.

Municipal NPDES Permit Waste Discharge Requirements

On November 8, 2012, the RWQCB adopted Order R4-2012-0175 (Waste Discharge Requirements for Municipal Separate Storm Sewer System) (MS4) Discharges within Coastal Watersheds of Los Angeles County (MS4 Permit). Order R4-2012-0175 became effective on December 28, 2013 and serves as the NPDES permit for coastal watershed stormwater and non-stormwater discharges originating from the Los Angeles County region. The permit covers the land areas in the Los Angeles County Flood Control jurisdiction, unincorporated areas of Los Angeles County, and 84 cities in the County. The City of Lawndale is included in the MS4 Permit as a permittee under Order R4-2012-0175.

In coordination with permittees under MS4 Permit, RWQCB staff performs annual performance reviews and evaluations of the City's stormwater management program and NPDES compliance activities.

Los Angeles County Department of Public Works Hydrology Manual

The Los Angeles County Department of Public Works Hydrology Manual (2006) contains the Standard Urban Stormwater Mitigation Plan (SUSMP) that applies to development and redevelopment projects in Los Angeles County, as described below. The Hydrology Manual also includes TMDLs for pollutants per

Section 303 of the CWA and BMPs for managing stormwater quality during construction. As the holder of the MS4 Permit, the RWQCB is responsible for enforcing these BMPs.

Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP)

The SUSMP is a comprehensive stormwater quality program to manage urban stormwater and minimize pollution of the environment in Los Angeles County. The purpose of the SUSMP is to reduce the discharge of pollutants in stormwater by outlining BMPs that must be incorporated into the design plans of new development and redevelopment. The SUSMP requirements contain a list of minimum BMPs that must be employed to infiltrate or treat stormwater runoff, control peak flow discharge, and reduce the post-Project discharge of pollutants from stormwater conveyance systems. The SUSMP requirements define, based upon land use type, the types of practices that must be included and issues that must be addressed as appropriate to the development type and size. The SUSMP requirements apply to all development and redevelopment projects that fall into one of the following categories:

- Single-family hillside residences
- One acre or more of impervious surface area for industrial/commercial developments
- Automotive service facilities
- Retail gasoline outlets
- Restaurants
- Ten or more residential units
- Parking lots of 5,000 square feet or greater or with 25 or more spaces
- Projects located in or directly discharging to an Ecologically Sensitive Area

The SUSMP requirements are administered, implemented, and enforced through the Community Development Department Building and Safety Division and final review would be conducted by the Chief Building Official. During the review process, individual development project plans are reviewed for compliance with stormwater requirements.

Dominguez Channel Watershed Management Area – Enhanced Watershed Management Program

The Dominguez Channel Watershed Management Area Enhanced Watershed Management Program (EWMP) was developed pursuant to the requirements set forth by Order No. R4-2012-0175, Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (MS4 Permit). The EWMP identifies water quality priorities and watershed control measures for compliance with all Dominguez Channel TMDLs. The EWMP Plan, along with a Coordinated Monitoring Plan, serves as a guiding document for implementing water quality improving infrastructure, policies, and programs. The City of Lawndale is a participating member in the Dominguez Channel Watershed Management Area EWMP.

West Coast Basin Judgment

In 1961, the West Coast Basin was adjudicated in the case *California Water Service Company, et al. vs. City of Compton, et al.* (Superior Court, County of Los Angeles, Case No 506806). The West Coast Basin

Judgment (Judgment) limits the amount of groundwater each party can extract annually from the West Coast Basin. Groundwater producers held by the Judgment have the right to annually pump the volume of water as decided in the adjudication. These limits are monitored by a court-appointed Watermaster. The Watermaster administers and enforces the terms of the Judgment and reports annually to the Court on significant groundwater-related events that occur in the Basin. The court also retained jurisdiction to monitor ongoing management of the West Coast Basin, including the conjunctive use of Basin storage space, to assure the Basin will be capable of supplying sufficient water to meet local needs, including future growth and development. In 2014, an Amended Judgment was accepted by the Court. The Amended Judgment modified the structure of the Watermaster from being administered by DWR to a three-panel structure: an administrative body administering Watermaster accounting and reporting; a water rights panel made up of members of the West Coast Basin Water Association; and a storage panel. The amendment allows storage in the basin by the water right holders. The Court also retained jurisdiction to monitor ongoing management of the West Coast Basin, including the conjunctive use of West Coast Basin storage space, to assure the West Coast Basin will be capable of supplying sufficient water to meet local needs, including future growth and development.

The West Coast Basin adjudication limit for groundwater extraction across the entire West Coast Basin is 64,468 acre-feet per year (AFY). Three agencies, the Los Angeles County Department of Public Works (LACDPW), Water Replenishment District of Southern California (WRDSC), and West Basin Municipal Water District (WBMWD), collaborate with the groundwater producers, such as GSWC, to ensure that the Allowed Pumping Allocation is available to be pumped from wells in the West Coast Basin. LACPW operates and maintains the West Coast Barrier Project and Dominguez Gap Barrier Projects, which maintain groundwater levels at the coast line to prevent seawater intrusion. LACDPW injects a combination of equal parts of treated wastewater from the WBMWD's water recycling plant located in El Segundo and imported water from Metropolitan Water District (MWD). WBMWD is expanding the West Coast Basin recycled water plant to allow up to 100 percent recycled water injection into the West Coast Basin Barrier Project. LACDPW injects imported water from MWD into the Dominguez Gap Barrier Project. The project currently is permitted for up to six million gallons per day of recycled water to be injected into the barrier with a 50 percent blend with potable water over a 60-month running average. By statute, WRDSC is required to determine replenishment requirements annually. WRDSC pays WBMWD for imported and recycled water for recharge into the West Coast Basin.

Central Basin Judgment

In 1965, the Central Basin was adjudicated in the case *Central and West Coast Basin Water Replenishment District vs. Charles E. Adams, et al.* (Superior Court, County of Los Angeles, Case No. 786656). The Central Basin Judgment limits the amount of groundwater each party can extract annually from the adjudicated portion of the Central Basin. This limit is referred to as the Allowed Pumping Allocation (APA), and is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Central Basin Watermaster is charged with developing the APA, as well as monitoring and reporting the Central Basin conditions in order to ensure groundwater overdraft and sea water intrusion do not occur. The Watermaster reports annually to the Court on the significant groundwater-related events that occur in the Central Basin. In 2013, the court entered the Third Amended Judgment. The Amended Judgment modified the structure of the Watermaster from being

administered by DWR to a three-panel structure: an administrative body administering Watermaster accounting and reporting; a water rights panel made up of seven members of the Central Basin water rights holders; and a storage panel.

City of Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 8.40, *Water Conservation*, allows the City Council to declare voluntary and mandatory water restrictions, as appropriate to water supply conditions. The stages include: conservation watch, drought watch, and drought emergency.

Municipal Code Title 13, *Public Services*, addresses wastewater and storm drains within the City. Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, establishes stormwater runoff controls and BMPs to prevent and/or reduce the quantity of pollutants from being discharged into the MS4. Section 13.12.060, *Best Management Practices Required*, requires the implementation of BMPs during project operation. Section 13.12.070, *Construction Activity Stormwater Measures*, requires applicants for grading or building permits within the City to provide satisfactory proof of compliance with the Construction General Permit, including a Stormwater Pollution Prevention Plan (SWPPP), when applicable. Applicants that are not required to comply with the Construction General Permit are required to implement a grading and construction activity runoff control program. Chapter 3.16, *Standard Urban Stormwater Mitigation Plan and Low Impact Development Implementation*, contains a number of requirements to control stormwater pollution. Subject new development and redevelopment projects are required to comply with standard urban stormwater mitigation program (SUSMP) conditions assigned by the City, consisting of LID structural and non-structural BMPs; source control BMPs; and structural and non-structural BMPs for specific types of uses. Section 13.16.060, *Stormwater Pollution Control and Design Standards for Best Management Practices (BMPs)*, requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Per Section 13.16.110, *Maintenance of Best Management Practices*, applicants for new subject development and redevelopment projects must agree to maintain any structural or treatment control BMPs.

Municipal Code Title 15, *Buildings and Construction*, adopts various uniform building and construction codes and safety precautions, including the California Building Code, the California Residential Code, the California Plumbing Code, the California Electrical Code, the California Mechanical Code, and the California Green Building Standards Code (CALGreen). The California Building Code contains flood resistant construction requirements. CALGreen contains regulations related to water efficiency and conservation.

Municipal Code Section 17.36.190, *Flood Control Easements—Obstruction Prohibited*, prohibits the placement of any structures or materials within the channel or bed of any river, stream, wash, or arroyo, or County flood control easement, which may alter water flow or damage adjacent property downstream.

Municipal Code Chapter 17.88, *Water Efficient Landscape*, promotes water-efficient landscaping by establishing standards for the design, maintenance, and install of water efficient landscapes in new and substantially altered or expanded existing development projects.

5.10.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to hydrology and water quality. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality (refer to Impact Statement HWQ-1);
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (refer to Impact Statement HWQ-2);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (refer to Impact Statement HWQ-3):
    - result in substantial erosion or siltation on- or off-site;
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation (refer to Impact Statement HWQ-4); and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (refer to Impact Statement HWQ-5).

5.10.5 IMPACTS AND MITIGATION MEASURES

HWQ-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact Analysis:

CONSTRUCTION

Grading, excavation, removal of vegetation cover, and loading activities associated with future construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion impacts that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

In compliance with NPDES Permit regulations, the State of California requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. Lawndale Municipal Code Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, establishes stormwater runoff controls and BMPs to prevent and/or reduce the quantity of pollutants from being discharged into the MS4. Section 13.12.070, *Construction Activity Stormwater Measures*, requires applicants for grading or building permits within the City to provide satisfactory proof of compliance with the Construction General Permit, including a SWPPP, when applicable. Applicants that are not required to comply with the Construction General Permit are required to implement a grading and construction activity runoff control program.

The General Plan Update sets policies and actions for buildout of the City, but it does not envision or authorize any specific development project. Because of this, the site-specific details of potential future development projects are currently unknown and analysis of potential impacts of such projects is not feasible and would be speculative. However, each future project must include detailed project specific drainage plans that control storm water runoff and erosion, both during and after construction. The RWQCB would require a project-specific SWPPP to be prepared for each future project that disturbs an area one acre or larger. The SWPPPs would include project-specific best management measures that are designed to control drainage and erosion. For projects disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants. Therefore, the proposed Project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade surface water or groundwater quality.

OPERATION

The Planning Area is primarily urbanized with limited pervious areas anticipated for development. The Project does not propose site-specific development; however, future development and redevelopment activities within the Planning Area have the potential to increase impervious areas resulting in increased runoff when compared to existing site conditions. Stormwater runoff may include pollutants such as

sediments, nutrients, pesticides, trash, oil and grease, and metals. The MS4 Permit (Order R4-2012-0175) and Lawndale Municipal Code regulate stormwater discharges within the Planning Area, and require the use of BMPs and other control measures to reduce the discharge of pollutants to receiving water bodies.

Future development projects within the Planning Area would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Chapter 3.16, which contains a number of requirements to control stormwater pollution, including post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID structural and non-structural BMPs to effectively reduce the amount of impervious area of a completed project site and promote the use of infiltration and other controls that reduce runoff; source control BMPs prevent runoff contact with pollutant materials that would otherwise be discharged to the MS4; and structural and non-structural BMPs for specific types of uses. Section 13.16.060 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110, *Maintenance of Best Management Practices*, requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. Federal, State and local regulations would require individual projects to provide the on-site storm drain infrastructure, including water quality measures, to ensure the stormwater runoff associated with the proposed development would be captured and treated on-site, protecting water quality both on- and off-site.

Waters that are listed under Section 303(d) of the CWA are known as "impaired." The Planning Area includes a portion of the Dominguez Channel (lined portion above Vermont Avenue), which is listed on the Section 303(d) list as a Category 5 water body, meaning that it is a water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for the segment (California State Water Resources Control Board 2023). Continued compliance with the Dominguez Channel Watershed Management Area EWMP, which in part requires the implementation of BMPs to reduce discharge of pollutants in stormwater to the maximum extent practicable, would help address water quality priorities and ensure compliance with the established regulatory framework, including the CWA.

Storm drain infrastructure in the City is jointly owned and operated by the City and County. The provision and maintenance of stormwater detention facilities, as needed, would reduce runoff rates and peak flows. The General Plan Update proposes goals, policies, and actions that aim to enhance stormwater quality and infiltration, as well as ensure development projects are reviewed to identify potential stormwater and drainage impacts and require development to include measures to confirm off-site runoff is not increased beyond pre-development levels. Proposed Resource Management Element Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged

water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Proposed Community Facilities Element Policy CF-4.1 encourages LACFCD to maintain sufficient levels of storm drainage service and improve flood control facilities and channel segments. Policy CF-4.2 encourages stormwater to be directed towards permeable surfaces to allow for more percolation of stormwater into the ground. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4d ensures City review of development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, WQMPs, SWPPPs, and to implement BMPs. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards. Through implementation of the General Plan Update policies and actions, implementation of the Municipal Code requirements identified above, compliance with mandatory Federal and State regulations, and compliance with the existing regulations for the Dominguez Channel Watershed, future development projects associated with implementation of the General Plan Update would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are

implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

COMMUNITY FACILITIES ELEMENT

Policy CF-4.1: **Maintain Capacity.** Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Policy CF-4.2: **Stormwater Runoff.** Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: **Stormwater Treatments.** Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: **National Programs.** Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HWQ-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: The Planning Area is underlain by the West Coast Basin of the Coastal Plain of the Los Angeles Groundwater Basin. The West Coast Basin is an adjudicated basin; groundwater extraction is monitored by the court-appointed Watermaster, who administers and enforces the terms of the West Coast Basin Judgment and reports annually to the Court on significant groundwater-related events that occur in the Basin. As indicated in Section 5.19, *Utilities and Service Systems*, potable water in the Planning Area is provided by the GSWC Southwest System. According to the GSWC Southwest 2020 UWMP, water supply sources include local groundwater and imported water purchased from the MWD. Groundwater that serves the Planning Area is pumped from the Central subbasin (Central Basin) and West Coast subbasin (West Coast Basin) of the Coastal Plain of Los Angeles Groundwater Basin.

Project implementation would provide opportunities for residential and non-residential development and is expected to result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies. As indicated in Section 5.19, the Project would result in a water demand of approximately 8.0 acre-feet per year (AFY) within the Planning Area, which would be a net increase of 1.6 AFY (25 percent) over existing conditions. As discussed, groundwater supplies constitute a major component of GSWC Southwest's water supply portfolio. GSWC Southwest uses adjudicated groundwater supplies from the Central Basin and West Coast Basin for use in its service area. However, the West Coast Basin Adjudication and Central Basin Adjudication limit the volumes of water that each party may extract from the respective basin. The APA is an assigned volume that is less than the historically available volume that was developed to reduce groundwater overdraft and seawater intrusion. The Watermaster is charged with monitoring and reporting the basins' conditions in order to ensure groundwater overdraft and sea water intrusion do not occur. Although Project implementation could result in an increased demand for water supplies, which have not been accounted for in the UWMP, the Project would not cause GSWC to pump additional groundwater supplies beyond its allocation or beyond the APA authorized through the adjudication of each basin. Thus, the Project would not substantially decrease groundwater supplies that would impede sustainable groundwater management of the basin. Refer to Section 5.19, regarding water supplies.

The Planning Area is underlain by the West Coast Basin. Although future development activities have the potential to increase impervious areas, these areas are limited and do not provide for substantial groundwater recharge within the Planning Area. Development activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Therefore, the proposed Project would not interfere substantially with groundwater recharge. Further, the West Coast and Central Basins are managed by an adjudication and subject to their respective Judgments managed by a Watermaster. The primary means of ensuring long-term groundwater level maintenance includes careful monitoring to ensure groundwater levels are managed within a safe basin operating range and implementation of water conservation programs. As described above, recharge to the West Coast Basin's groundwater supply is mostly underflow from the Central Basin, through the Newport-Inglewood fault zone, and injection into the West Coast Basin; natural sources of groundwater recharge from percolation of precipitation, irrigation return flow from fields and lawns, and other applied surface waters are relatively minor. Given that future development associated with implementation of the Project would not appreciably add to the volume of imperious surfaces in the Planning Area, potential impacts to groundwater recharge such that the Project may impede sustainable groundwater management of the basin would be less than significant.

The General Plan Update includes policies and actions that support water conservation, groundwater management, and coordination with local water districts when planning for adequate capacity to accommodate future growth. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6b calls for the City to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Under Action RM-6c, the City will work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-2.1 directs City coordination with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Action CF-2c directs the City to cooperate with the State, regional, and local water agencies and suppliers to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Implementation of the General Plan policies, combined with continued management of the West Coast and Central Basins, would further ensure that future development anticipated by the General Plan Update would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: **Conservation.** Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: **Water Supply Needs.** Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: **Use of Recycled Water.** Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: **Climate Change Impacts.** Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HWQ-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- **result in substantial erosion or siltation on- or off-site;**
- **substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- **impede or redirect flood flows?**

Impact Analysis:

EROSION AND SILTATION

The Planning Area is primarily urbanized with limited pervious areas anticipated for development. Implementation under the General Plan Update would result in new development and redevelopment projects with the potential to increase the area of impervious surfaces and/or result in alteration of existing drainage patterns. Substantial erosion or siltation is known to result during construction and/or during the post-construction phase if erosion control measures are not used. Erosion or siltation can also occur in the post-construction phase if runoff is not captured and conveyed appropriately.

As stated above, future development under the General Plan Update would be subject to NPDES permit requirements that address the control of erosion and siltation. This includes the Construction General Permit, which requires a SWPPP and the effective implementation of erosion control measures for projects greater than one acre in size (or part of a larger plan of development). The Los Angeles RWQCB conducts inspections and enforces the Construction General Permit at construction sites. Additionally, Lawndale Municipal Code Section 13.12.070, *Construction Activity Stormwater Measures*, requires

applicants for grading or building permits within the City to provide satisfactory proof of compliance with the Construction General Permit, including a SWPPP, when applicable. Applicants that are not required to comply with the Construction General Permit are required to implement a grading and construction activity runoff control program.

Development under the General Plan Update would also be subject to the post-construction requirements of the MS4 NPDES permit. Lawndale Municipal Code Section 13.16.060 requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. The SUSMP ensures that implementing project designs have incorporated LID BMPs for the effective treatment of pollutants of concern in stormwater runoff from a design storm event. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110, *Maintenance of Best Management Practices*, requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects.

Further, the General Plan Update Public Safety Element and Resource Management Element includes goals, policies, and actions that address erosion and siltation from the addition of impervious surfaces and alteration of existing drainage patterns. Proposed Resource Management Element Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Through implementation of the General Plan Update policies and existing regulations, erosion/siltation impacts from changes to the existing drainage patterns and increasing impervious surfaces would be less than significant.

SURFACE RUNOFF

As previously described, LACFCD and the City operate and maintain a network of flood control facilities within the Planning Area. Flooding can occur from an increase in impervious surfaces, which increases the volume and speed of runoff. When the volume and speed of runoff are increased, drainage facilities may be unable to handle the flows and capacity could be exceeded. As previously stated, the Planning Area is primarily developed, with limited areas of pervious surfaces. Although future development activities have the potential to slightly increase impervious areas within the Planning Area, the majority of development

activities associated with implementation of the Project would consist of infill and redevelopment on currently urbanized sites. Federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with the proposed development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard.

The General Plan Update contains policies and actions to provide adequate stormwater infrastructure for flood control and to reduce run-off quantity. Proposed Resource Management Element Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment. Proposed Community Facilities Element Policy CF-4.1 encourages LACFCD to maintain sufficient levels of storm drainage service and improve flood control facilities and channel segments. Policy CF-4.2 encourages stormwater to be directed towards permeable surfaces to allow for more percolation of stormwater into the ground. Policy CF-4.3 promotes BMPs and LID measures to treat stormwater before discharge from the site. Policy CF-4.4 directs the City to participate in regional programs to implement the NPDES program. Action CF-4a ensures the City continues to implement the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA. Action CF-4b directs the City to work with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Action CF-4d ensures City review of development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. Additionally, Lawndale Municipal Code Chapter 17.88, *Water Efficient Landscape*, establishes requirements and standards for water efficient landscapes in new and substantially altered or expanded existing development projects, including the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Through implementation of the General Plan Update Plan policies and actions and existing Federal, State, and local regulations discussed above, runoff would not exceed the capacity of drainage systems, provide substantial additional sources of polluted runoff, or cause flooding impacts from changes to the existing drainage patterns and increased impervious surfaces. Therefore, impacts would be less than significant.

FLOOD FLOWS

The Planning Area is highly urbanized and primarily developed with residential and non-residential uses. The Dominguez Channel is a channelized watercourse that runs through the eastern portion of the Planning Area. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. As described above and shown in Figure 5.10-3, there are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard.

The General Plan Update sets policies and actions for buildout of the City, but does not envision or authorize any specific development project. The General Plan Update contains policies and actions designed to reduce runoff flows and flood risk in the City. Proposed Public Safety Element Policy PS-5.1 coordinates with local, State, and Federal agencies so that the City's regulations related to flood control comply with Federal, State, and Local standards. Policy PS-5.3 requires development projects to adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. Action PS-5a directs the City to monitor changes in Federal and State laws and regulations related to local flood protection, including the NFIP, and incorporates necessary changes into the Municipal Code and building codes as required. Action PS-5c directs the City to review County, State, and Federal flood control best practices and incorporates appropriate standards into the Municipal Code. As described above, the City has adopted the California Building Code, which contains flood resistant construction requirements. Future development projects would be required to adhere to applicable Federal, State, and local flood-related regulations. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and would be considered in the environmental review associated with the specific project being proposed. With implementation of General Plan Update goals, policies, and implementation and compliance with existing regulations, the General Plan Update would not impede or redirect flood flows; impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that

projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-5.1: **Flood Control Regulations.** Coordinate with local, state, and Federal agencies so that the City's regulations related to flood control are in compliance with Federal, State, and Local standards.

Policy PS-5.3: **Site Design.** Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4: **Best Management Practices.** Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.5: **Changing Conditions.** Coordinate with the Los Angeles County Flood Control and Waterworks Districts on changing flood conditions associated with climate change and extreme weather.

Policy PS-5.6: **Local Storm Drainage Infrastructure.** Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Action PS-5a: Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code and building codes as required.

Action PS-5b: Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.

Action PS-5c: Periodically review County, State, and Federal flood control best practices and incorporate appropriate standards into the Municipal Code.

COMMUNITY FACILITIES ELEMENT

Policy CF-4.1: **Maintain Capacity.** Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Policy CF-4.2: **Stormwater Runoff.** Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: **Stormwater Treatments.** Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: **National Programs.** Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HWQ-4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: As described above and shown in Figure 5.10-3, there are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard. Should future development projects become inundated during a future flood event, there is a risk of pollutants being released inadvertently into the environment. As described above, pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. SWPPPs are designed to control storm water quality degradation to the extent practicable using BMPs during and after

construction. Further, the General Plan Update includes policies and actions to reduce the risk of flooding and ensure compliance with regulatory requirements. Proposed Public Safety Element Policy PS-5.1 coordinates with local, State, and Federal agencies so that the City's regulations related to flood control comply with Federal, State, and Local standards. Policy PS-5.2 coordinates with FEMA so that Federal Insurance Rate Maps correctly depict flood hazards in the City. Policy PS-5.3 requires development projects to adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Policy PS-5.5 coordinates with LACFCD on changing flood conditions associated with climate change and extreme weather. Policy PS-5.6 directs the City to maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property. Action PS-5a directs the City to monitor changes in Federal and State laws and regulations related to local flood protection, including the NFIP, and incorporates necessary changes into the Municipal Code and building codes as required. Action PS-5c directs the City to review County, State, and Federal flood control best practices and incorporates appropriate standards into the Municipal Code. Proposed Resource Management Element Action RM-6a requires the implementation of BMPs and compliance with the City's MS4 permit to control stormwater runoff and prevent water quality impairment.

Tsunamis are a series of waves in a water body caused by the displacement of a large volume of water, generally in an ocean or a large lake due to earthquakes, volcanic eruptions, and other underwater explosions. The Planning Area is approximately three miles inland of the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. Seiches are the oscillation of large bodies of standing water, such as lakes, that can occur in response to ground shaking. Any body of water may experience limited oscillation during storm events or following seismic events, however oscillation in small bodies of water is generally limited. There are no dams with the potential to inundate the Planning Area according to the Division of Safety of Dams Dam Breach Inundation Maps. There is a man-made lake in Alondra Park, within close proximity to the Planning Area; however, due to its size and the flat topography of the area, this lake would not generate a significant seiche risk to the Planning Area. As a result, tsunamis and seiches do not pose hazards to the Planning Area.

With implementation of General Plan Update policies and actions, and implementation and compliance with existing regulations, impacts associated with the risk of pollutants from seiches and flooding that may result from adoption and implementation of the General Plan Update would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

PUBLIC SAFETY ELEMENT

Policy PS-5.1: **Flood Control Regulations.** Coordinate with local, state, and Federal agencies so that the City's regulations related to flood control are in compliance with Federal, State, and Local standards.

Policy PS-5.2: **Flood Maps.** Coordinate with Federal Emergency Management Agency (FEMA) so that Federal Insurance Rate Maps correctly depict flood hazards in the City.

Policy PS-5.3: **Site Design.** Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4: **Best Management Practices.** Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.5: **Changing Conditions.** Coordinate with the Los Angeles County Flood Control and Waterworks Districts on changing flood conditions associated with climate change and extreme weather.

Policy PS-5.6: **Local Storm Drainage Infrastructure.** Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Action PS-5a: Monitor changes in Federal and State laws and regulations related to local flood protection, including the National Flood Insurance Program and incorporate necessary changes into the Municipal Code and building codes as required.

Action PS-5b: Communicate with FEMA annually regarding updates to Flood Insurance Rate Maps and Letter of Map Revisions.

Action PS-5c: Periodically review County, State, and Federal flood control best practices and incorporate appropriate standards into the Municipal Code.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HWQ-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the Los Angeles RWQCB. The Basin Plan specifies the State's water quality standards (i.e., beneficial uses, water quality objectives, and antidegradation policy) and serves as the basis for the RWQCB's regulatory programs. When permittees and projects comply with the provisions of applicable NPDES permits and water quality permitting, they are consistent with the Basin Plan. The General Plan Update includes policies to implement NPDES requirements and enforcement of said regulations, such as: Action RM-6a, which ensures projects of one acre or more complete a SWPPP in compliance with State law and the City's MS4 permit; Action CF-4a, which implements the Watershed Control Measures identified in the EWMP for the Dominguez Channel WMA Group; and Action CF-4b, which works with the Los Angeles RWQCB, LACFCD, and Dominguez Channel WMA Group to meet the requirements of the MS4 Permit. Through implementation of existing regulations and the General Plan Update policies and actions, implementation of the General Plan Update would not conflict or obstruct a water quality control plan. Therefore, impacts in this regard will be less than significant.

As described above, the Planning Area receives water from the GSWC Southwest System, which receives groundwater from the Central Basin and West Coast Basin. In compliance with the Central Judgment and West Coast Judgment, the Watermasters submit an annual report to the Los Angeles County Superior Court, which has jurisdiction to monitor ongoing management of the basins. The Central and West Coast Basins were designated as very low priority basins in DWR's 2019 SGMA Basin Prioritization report (California Department of Water Resources 2020). SGMA exempts adjudicated groundwater basins from the requirements of designating a Groundwater Sustainability Agency and developing a Groundwater Sustainability Plan. The Central Judgment and West Coast Judgment provide for the legal and practical means of ensuring that the waters of each Basin are sustainably managed and put to maximum beneficial use. The General Plan Update does not propose site-specific development. New development and redevelopment projects accommodated by the General Plan Update would be subject to the Central Basin Judgment West Coast Basin Judgment. Subsequent development projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Therefore, the General Plan Update would not conflict with implementation of a sustainable groundwater management plan.

The General Plan Update includes policies to support water conservation and responsible management of groundwater resources which is consistent with the tasks of the Watermaster. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems,

the selection of appropriate plant materials, and proper soil preparation. Action RM-6b calls for the City to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Under Action RM-6c, the City will work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy directs City coordination with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Thus, adoption and implementation of the General Plan Update will not conflict or obstruct a sustainable groundwater management plan and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: **Conservation.** Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6a: To reduce soil erosion and pollutants in urban runoff, require new development and redevelopment projects to control stormwater runoff through implementation of Best Management Practices (BMPs) to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Existing development shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. As specific development projects are implemented, project proponents will be required to consult with relevant agencies such as the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). Also, ensure that projects of one acre or more complete a Storm Water Pollution Prevention Plan (SWPPP) pursuant to State of California, Los Angeles Regional Water Quality Control Board (RWQCB) and the City's MS4 permit (order no. R4-2012-0175 (NPDES No. CAS 004001).

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: **Water Supply Needs.** Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: **Use of Recycled Water.** Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: **Climate Change Impacts.** Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Policy CF-4.2: **Stormwater Runoff.** Encourage stormwater be directed towards permeable surfaces to allow for more percolation of stormwater into the ground.

Policy CF-4.3: **Stormwater Treatments.** Promote Best Management Practices (BMPs) and Low Impact Development measures (LID) to treat stormwater before discharge from the site.

Policy CF-4.4: **National Programs.** Cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Action CF-4a: Continue to implement the Watershed Control Measures identified in the Enhanced Watershed Management Program (EWMP) for the Dominguez Channel Watershed Management Area Group. Review and update as needed.

Action CF-4b: Work with the Los Angeles Regional Water Quality Control Board (RWQCB), Los Angeles County Flood Control District (LACFCD), and Dominguez Channel Watershed Management Area (DCWMA) Group to meet the requirements of Municipal Separate Storm Sewer System (MS4) Permit Order R4-2012-0175.

Action CF-4c: Encourage new developments and/or public roadway projects to incorporate recommendations from the Dominguez Watershed Management Master Plan, including:

- Use of pervious pavement during development and redevelopment;
- Install and maintain catch basin inserts in high priority areas;
- Reduce green waste to storm drains;
- Create grassy swales and/or vegetated areas to treat urban runoff;
- Perform roadway improvements using vegetated medians, buffers and/or parkways;
- Use water-wise landscaping;
- Use and expansion of the recycled water system; and
- Installation of rainwater harvesting systems and cisterns.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.10.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis,* identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to hydrology and water quality may occur. The cumulative projects are within the same watershed

as the Planning Area and stormwater would be conveyed by the LACFCD and the City, similar to the Project.

Would the project, combined with other related cumulative projects, violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Impact Analysis: Future development associated with implementation of the Project and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. For projects within the City disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants. Regional projects disturbing less than one acre would be required to comply with the SUSMP and/or applicable jurisdictional-level BMPs to reduce the discharge of pollutants.

Additionally, future Project development and cumulative development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future development and cumulative development would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Section 13.16.060, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110, *Maintenance of Best Management Practices*, requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs.

Future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on hydrology and water quality to a less-than-significant level. Thus, the proposed Project's incremental effects involving a violation of water quality standards or waste discharge requirements, or a substantial degradation of surface water or groundwater quality, would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis: The Project proposes a comprehensive update to the City's existing General Plan, including a revised Land Use Map. The General Plan Update does not include any site-specific development, but would enable future residential and non-residential development and is expected to result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies. The Basin is managed by an adjudication and subject to the Judgment managed by the Watermaster, which ensures ongoing management of the Basin and assures the Basin will be capable of supplying sufficient water to meet local needs, including future growth and development.

The Planning Area and surrounding area is primarily urbanized with limited pervious areas anticipated for development. Although future development and cumulative development have the potential to increase impervious areas, these areas are limited and do not provide for substantial groundwater recharge within the Planning Area and surrounding areas. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including water conservation measures and LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on groundwater to a less than significant level. Therefore, the proposed Project's incremental effects involving a substantial decrease in groundwater supplies or substantial interference with groundwater recharge is not cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

- **Result in substantial erosion or siltation on- or off-site;**
- **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;**
- **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**

- **Impede or redirect flood flows?**

Impact Analysis:

Erosion and Siltation

Future development associated with implementation of the Project and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Future development and cumulative development would be required to comply with NPDES Permit regulations, which requires that any construction activity disturbing one acre or more of soil comply with the Construction General Permit. The permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control stormwater quality degradation due to potential construction-related pollutants. For projects disturbing less than one acre, Lawndale Municipal Code Section 13.12.070 would require compliance with minimum BMPs to reduce the discharge of pollutants. Regional projects disturbing less than one acre would be required to comply with the SUSMP and/or applicable jurisdictional-level BMPs to reduce the discharge of pollutants.

Additionally, future development could increase impervious areas resulting in increased stormwater runoff when compared to existing site conditions. Future development and cumulative development would be required to be consistent with the MS4 Permit and Lawndale Municipal Code Section 13.16.060, which requires post-construction runoff pollution reduction BMPs implemented through the SUSMP, including LID BMPs. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Section 13.16.110, *Maintenance of Best Management Practices*, requires ongoing maintenance of structural or treatment control BMPs by subject development and redevelopment projects. Other existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on hydrology and water quality to a less-than-significant level. Therefore, the proposed Project's incremental effects involving erosion and siltation is not cumulatively considerable.

Surface Runoff and Water Quality

The Planning Area is primarily urbanized with limited pervious areas anticipated for development. Although future development and cumulative development have the potential to increase impervious areas, Federal, State, and local regulations would require individual projects to provide the on-site storm drain infrastructure and any off-site infrastructure improvements to ensure stormwater runoff associated with future and cumulative development would be adequately captured and conveyed into the City's storm drain system and LACFCD facilities. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff which would result in flooding on- or offsite or

create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant in this regard. Therefore, the proposed Project's incremental effects involving or contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems is less than cumulatively considerable.

Future Project development and cumulative development within the City and surrounding areas may involve future construction activities that could temporarily increase runoff, erosion, and sedimentation. Lawndale Municipal Code Chapter 17.88, *Water Efficient Landscape*, promotes establishes requirements and standards for water efficient landscapes in new and substantially altered or expanded existing development projects, including the integration of stormwater BMPs into landscape design plans to minimize runoff and to increase on-site rainwater retention and infiltration. Existing regulatory requirements that manage water quality include requirements to obtain approval from the RWQCB for NPDES permits, other discharge permits, SUSMPs, SWPPPs, and to implement BMPs. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on hydrology and water quality to a less-than-significant level. Therefore, the proposed Project's incremental effects involving substantial additional sources of polluted runoff would be less than cumulatively considerable.

Flood Flows

The Planning Area is highly urbanized and primarily developed with residential and non-residential uses. The Project does not propose any changes to the Dominguez Channel and would not result in the alteration of the course of a river or stream. Flood impacts are site specific and generally do not combine to result in cumulative impact. Additionally, there are no mapped flood hazard zones located within the Planning Area. Pursuant to the CWA, each subsequent development project or improvement project that disturbs more than one acre would be required to obtain NPDES coverage under the Construction General Permit, which would require an approved SWPPP that includes BMPs for grading and preservation of topsoil. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure project. Therefore, the proposed Project's incremental effects involving impeding or redirecting flood flows would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis: Flood impacts are site specific and generally do not combine to result in cumulative impacts. There are no mapped flood hazard zones located within the Planning Area. The Planning Area is

approximately three miles inland of the Pacific Ocean and is not located within a mapped Tsunami Hazard Area. There are no dams with the potential to inundate the Planning Area according to the Division of Safety of Dams Dam Breach Inundation Maps. Although there is a man-made lake within close proximity to the Planning Area, the lake does not generate a significant seiche risk to the Planning Area due to its size and the flat topography of the area. As a result, tsunamis and seiches do not pose hazards to the Planning Area. Additionally, construction of storm drainage improvements would occur as part of an overall development or infrastructure projects. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs and implementation of LID BMPs, which would reduce the risk of release of pollutants due to inundation within the Planning Area. Therefore, the proposed Project's incremental effects involving the risk of release of pollutants due to project inundation would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis: As described above, the local water quality control plan (Basin Plan) is maintained by the Los Angeles RWQCB. The Basin Plan specifies the State's water quality standards (i.e., beneficial uses, water quality objectives, and antidegradation policy) and serves as the basis for the RWQCB's regulatory programs. Future development and cumulative development projects would be required to comply with the provisions of applicable NPDES permits and water quality permitting, consistent with the Basin Plan. Therefore, the proposed Project's incremental effects involving implementation of a water quality control plan is less than cumulatively considerable.

As described above, the Planning Area is located entirely within the West Coast Basin and subject to the West Coast Judgment. The West Coast Judgment provides for the legal and practical means of ensuring that the waters of the Basin are sustainably managed and put to maximum beneficial use. The Project does not propose site-specific development. Future development and cumulative development projects would be subject to the West Coast Judgment. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to hydrology and water quality, including compliance with construction BMPs, implementation of LID BMPs, and water conservation measures. Therefore, the proposed Project's incremental effects involving obstruction of implementation of a sustainable groundwater management plan is less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.10.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Hydrology and water quality impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable hydrology and water quality impacts would occur as a result of the General Plan Update.

5.10.8 REFERENCES

California Department of Conservation, *California Tsunami Maps and Data*, https://www.conservation.ca.gov/cgs/tsunami/maps, accessed March 13, 2023.

California Department of Water Resources (DWR), *California's Groundwater: Bulletin 118 – Update 2003,* October 2003.

California Department of Water Resources (DWR), *Dam Breach Inundation Map Web Publisher*, https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2, accessed March 13, 2023.

California Department of Water Resources (DWR), *Sustainable Groundwater Management Act 2019 Basin Prioritization*, May 2020.

California State Water Resources Control Board (SWRCB), *Category 5: 2020 California 303(d) List of Water Quality Limited Segments (CWA Section 303(d) List / 305(b) Report),* https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category5_report.shtml, accessed March 13, 2023.

Dominguez Channel Watershed Management Area Group, *Draft Enhanced Watershed Management Program Work Plan for the Dominguez Channel Watershed Management Group*, June 2014.

Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan*, July 2021.

Los Angeles County Flood Control District (LACFCD), *Enhanced Watershed Management Programs Draft Program Environmental Impact Report*, January 2015.

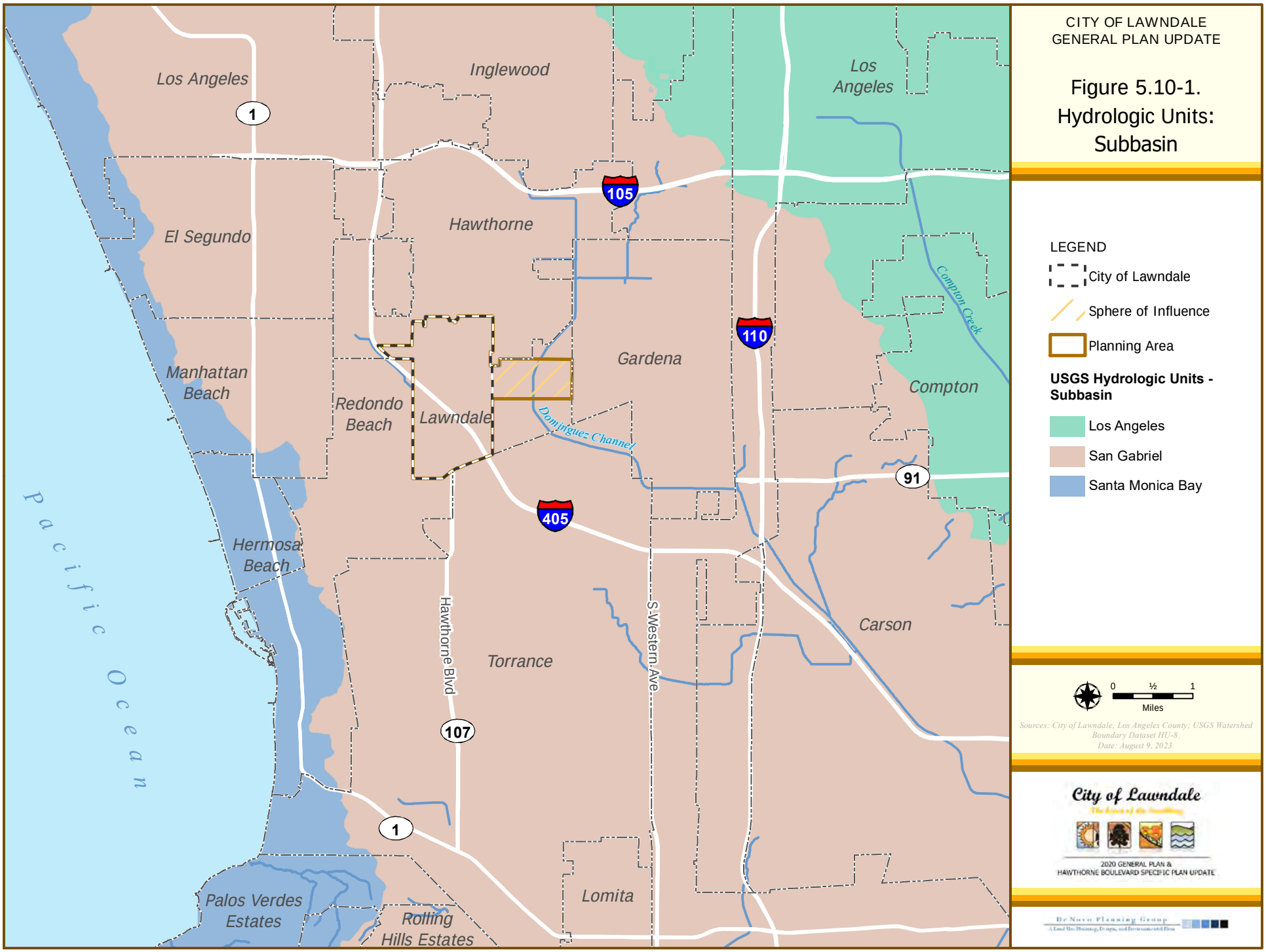
Los Angeles County Flood Control District (LACFCD), *About the District*, https://pw.lacounty.gov/LACFCD/web/, accessed March 10, 2023.

Los Angeles Regional Water Quality Control Board (RWQCB), *Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, September 2014.

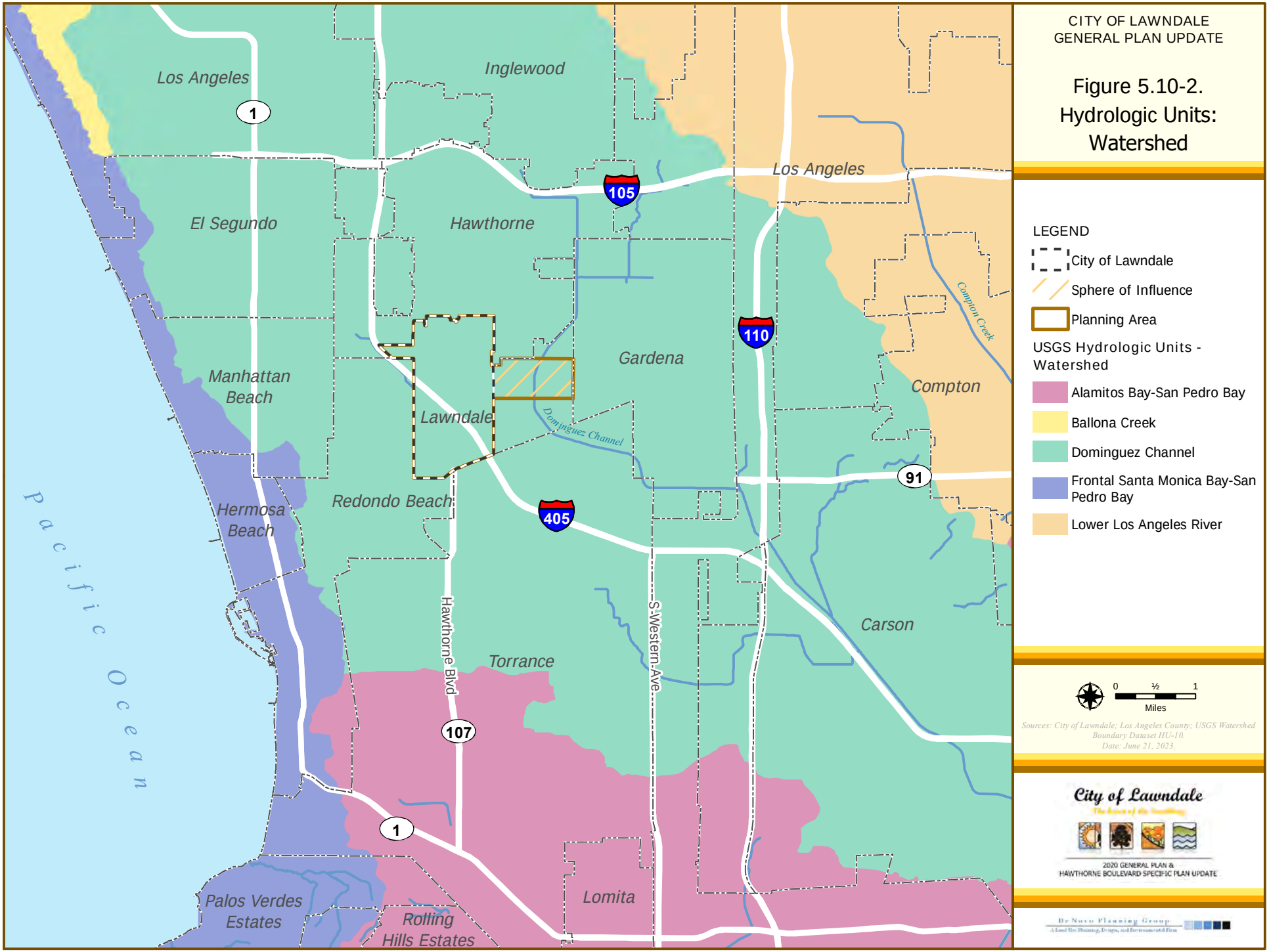
Los Angeles Regional Water Quality Control Board (RWQCB), *Dominguez Channel and Los Angeles/Long Beach Harbors WMA*, https://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/dominguez_channel/dominguez_channel.pdf, accessed March 13, 2023.

Los Angeles Regional Water Quality Control Board (RWQCB), *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties – Chapter 2, Beneficial Uses*, May 2019.

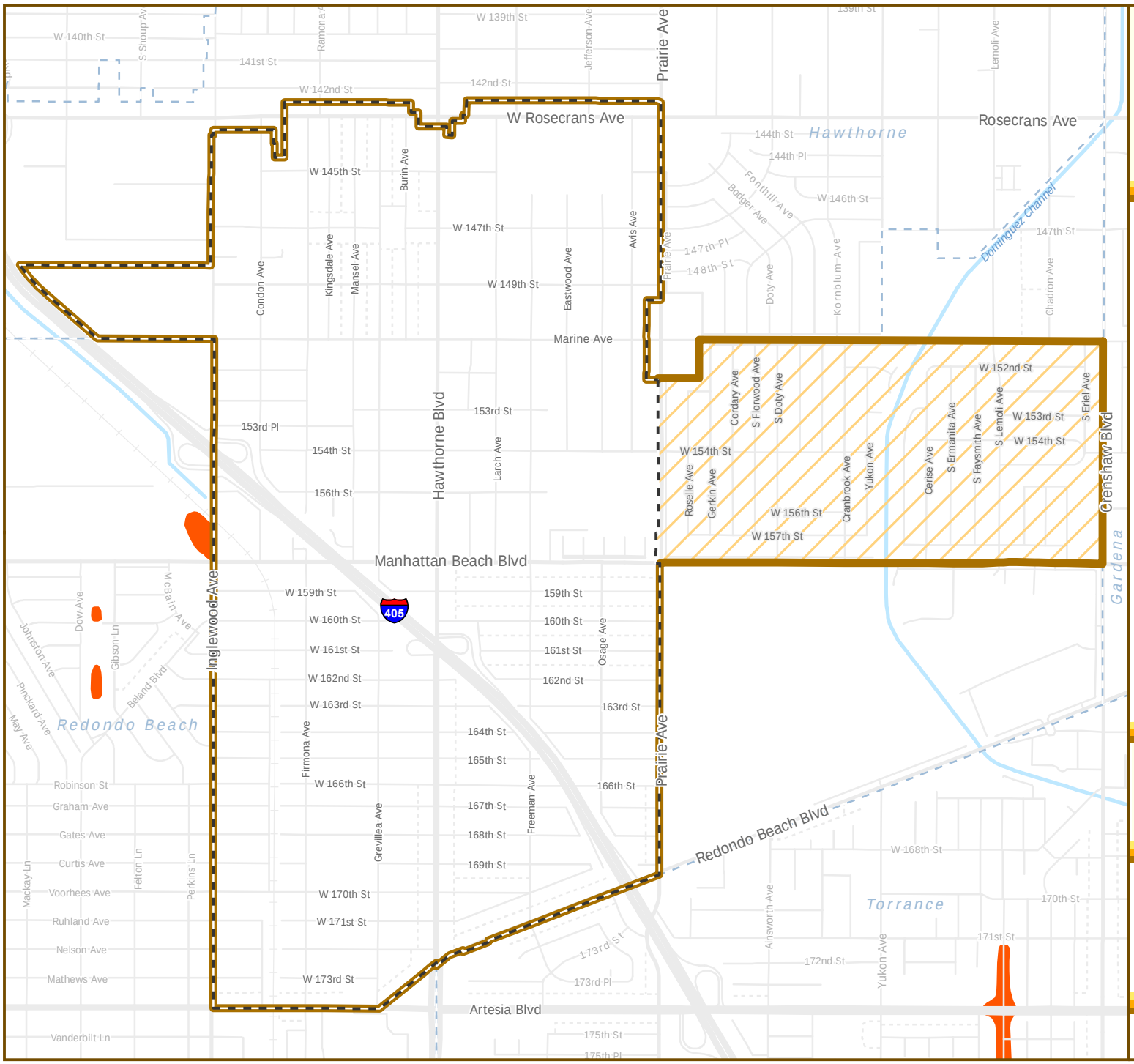
United States Geological Survey (USGS), *Hydrologic Unit Maps: What are Hydrologic Units?*, https://water.usgs.gov/GIS/huc.html, accessed August 10, 2023.


CITY OF LAWNDALE
GENERAL PLAN UPDATE
Figure 5.10-1.
Hydrologic Units:
Subbasin
LEGEND
City of Lawndale
Sphere of Influence
Planning Area
USGS Hydrologic Units - Subbasin
Los Angeles
San Gabriel
Santa Monica Bay
0
½
1
Miles
Sources: City of Lawndale; Los Angeles County; USGS Watershed Boundary Dataset HU-8.
Date: August 9, 2023.
City of Lawndale
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE
De Novo Planning Group
Los Angeles
Inglewood
Los Angeles
El Segundo
Hawthorne
Manhattan Beach
Redondo Beach
Lawndale
Gardena
Compton
Compton Creek
Dominguez Channel
Hermosa Beach
Torrance
Carson
Lomita
Palos Verdes Estates
Rolling Hills Estates
Pacific Ocean
Hawthorne Blvd
S Western Ave
1
105
110
91
405
107
1

This page intentionally left blank.


CITY OF LAWNDALE
GENERAL PLAN UPDATE
Figure 5.10-2.
Hydrologic Units:
Watershed
LEGEND
City of Lawndale
Sphere of Influence
Planning Area
USGS Hydrologic Units - Watershed
Alamitos Bay-San Pedro Bay
Ballona Creek
Dominguez Channel
Frontal Santa Monica Bay-San Pedro Bay
Lower Los Angeles River
0
½
1
Miles
Sources: City of Lawndale; Los Angeles County; USGS Watershed Boundary Dataset HU-10.
Date: June 21, 2023.
City of Lawndale
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE
Los Angeles
Inglewood
El Segundo
Hawthorne
Los Angeles
Gardena
Compton
Compton Creek
Manhattan Beach
Lawndale
Dominguez Channel
Hermosa Beach
Redondo Beach
Carson
Torrance
Hawthorne Blvd
S Western Ave
Lomita
Palos Verdes Estates
Rolling Hills Estates
Pacific Ocean
1
105
110
91
405
107
1

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.10-3. FEMA Flood Map

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- 100-Year Flood Zone (none within the mapped extent)
- 500-Year Flood Zone
- unshaded — Area of Minimal Flood Hazard

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; FEMA National Flood Hazard Layer.
Date: June 21, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.11 LAND USE AND PLANNING

This section identifies existing land use conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

One comment was received during the NOP comment period regarding land use and planning. The comment was received from the Southern California Association of Governments (SCAG). SCAG provides informational resources and recommendations to ensure consistency of the proposed General Plan Update with Connect SoCal (the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy).

5.11.1 ENVIRONMENTAL SETTING

A City's limits include the area within the City's corporate boundary, over which the City exercises land use authority and provides public services. A City's Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO). A SOI may include both incorporated and unincorporated areas within which a city or special district will have primary responsibility for the provision of public facilities and services. Lawndale's SOI is contiguous with its City Limits. For the purposes of the Lawndale General Plan Update, the Planning Area is defined as the area within the City's corporate boundary and its SOI. Figure 3-2 in Section 3.0, *Project Description*, shows the Lawndale Planning Area boundary.

LAND USE PATTERNS

When discussing land use, it is important to distinguish between planned land uses and existing land uses. The current General Plan land use designations identify the long-term planned use of land, but do not necessarily present a complete picture of existing land uses. The Los Angeles County Assessor's office maintains a database of existing "on-the-ground" land uses on individual parcels, including the number of dwelling units and related improvements such as non-residential building square footage. However, it should be noted that the Los Angeles County Assessor data does not always accurately reflect existing on-the-ground conditions. The Los Angeles County Assessor's database was used as a starting point for establishing baseline conditions and updated and modified based on City staff knowledge of individual parcels, where possible, to more accurately reflect current conditions.

Figure 5.11-1, *Existing Land Use Map*, shows a map of existing on-the-ground land uses in the City of Lawndale. Existing (on-the-ground) development within the Planning Area are identified in Table 5.11-1, *Existing Land Use Summary*. As evident from the map and summary table, Lawndale is dominated by single-family and duplex housing (e.g., single-family detached, duplex/double unit). Commercial uses are primarily located along major corridors, including Hawthorne Boulevard, Redondo Beach Boulevard, and Manhattan Beach Boulevard.

Table 5.11-1
Existing Land Use Summary

Land Use	City (Acres)	SOI (Acres)	Total (Acres)	% of Total Acres
Single Family Residential	248.83	198.22	447.04	28.7%
Duplex Residential	233.80	3.32	237.12	15.2%
Multi-Family Residential	148.34	0.61	148.95	9.6%
Mobile Home Park	3.94	0	3.94	0.3%
Commercial	110.35	10.00	120.35	7.7%
Industrial	23.16	0	23.16	1.5%
Government – Educational Facilities	93.72	9.47	103.19	6.6%
Government – Public Facilities	35.30	0	35.30	2.3%
Institutional	8.15	0	8.15	0.5%
Open Space and Recreational	0.97	0	0.97	0.1%
Miscellaneous	9.60	7.83	17.42	1.1%
Right-of-Way	324.84	84.55	409.41	26.3%
Total	**1,241**	**314**	**1,555**	**100%**

Notes:
SOI – Sphere of Influence

Residential

Like many cities in Los Angeles County, Lawndale's housing stock is comprised primarily of single-family homes, representing about two-thirds of housing units in the City. Approximately 7,201 single-family dwelling units and 4,262 multi-family units are within the Planning Area. Other residential uses, including mobile home communities, exist in Lawndale but are less prevalent than single-family developments within the City. Approximately 236 mobile home units exist in the Planning Area (Department of Finance 2023).

Commercial

Retail is the predominant commercial real estate product type in the City in terms of square feet accounting for nearly two-thirds of the total commercial space, followed by industrial/flex, office, and hotel. Industrial and flex uses make up just 15 percent of commercial space in Lawndale, and the City has added no new industrial/flex space over the past ten years. The office space inventory in Lawndale is approximately equivalent to its industrial and flex space. The City has about 305 rooms across five hotels.

Government – Educational Facilities

The Planning Area is primarily served by the Lawndale Elementary School District (LESD) and Centinela Valley Union High School District (CVUHSD). Environmental Charter High School leases a site in the City of Lawndale from LESD and provides a grade 9-12 program with emphasis on experiential, project-based learning. Twelve (12) public schools exist in the Planning Area. LESD includes six elementary and two

middle schools; and CVUHSD includes two comprehensive high schools, two alternative high school, and one adult education school.

Government – Public Facilities

The category of Government – Public Facilities includes fire stations, public schools' recreational facilities that are used as public parks, government offices, and public facilities. Approximately two percent, or 35 acres, of land are designated for government facilities in the Planning Area.

Institutional

Institutional uses include churches, care facilities, private schools and other institutions totaling 8.15 acres.

Open Space and Recreational

Open Space and Recreational uses include City-owned parks and clubs, lodge halls and fraternal organizations. The open space designation allows for passive and active recreation sites operated by the City.

Miscellaneous

Miscellaneous uses include utility uses such as pumping stations. Approximately one percent of the Planning Area is designated for miscellaneous uses.

PROJECTS UNDER REVIEW

The projects under review or recently completed in the City are shown in Table 5.11-2, *City of Lawndale Projects Under Review*.

Table 5.11-2
City of Lawndale Projects Under Review

Project Name	Location	Description	Status
Anastasi Development	15122, 15200 and 15206 Grevillea Avenue	33 residential units and 6 commercial suites	Pending
3600 Torrance Management, LLC	15314 Grevillea Avenue	7 apartment units	Building permit in process
Ashook Patel	15223 Hawthorne Boulevard	Multi-story hotel with 197 rooms	Pending
17000 Hawthorne Blvd Opp. Fund LLC	17000 Hawthorne Boulevard	70-unit mixed-use project with retail on first floor	Approved
Konstro Construction	15022 Kingsdale Avenue	8 townhomes-style condominium units	Approved
Alan Nguyen	4208 and 4216 Manhattan Beach Boulevard	8 condominium units	Complete
Amir Sharghi	4578 Manhattan Beach Boulevard	Multi-story residential and commercial mixed-use project	Pending

Table 5.11-2 (continued)
City of Lawndale Projects Under Review

Project Name	Location	Description	Status
Far Field Beer Company	4471 Rosecrans Avenue	Beer manufacturing and distribution tasting room	Completed
3600 Torrance Management, LLC	4440 W. 153rd Street	41-unit mixed-use project with first floor retail	Completed
3600 Torrance Management, LLC	4019 and 4025 W. 169th Street	5 condominium units	Pending
Hamid Pournamdari	4347 W. 171st Street	3 condominium units	Completed
Icon & Ikon	4604 W. 172nd Street	4 townhome-style condominium units	Approved and under construction
Beach Front	16900 Hawthorne Boulevard	25-unit mixed-use project with commercial use	Approved
15801 Hawthorne	15801 Hawthorne Boulevard	50-unit mixed-use project with commercial use	Pending
Source: City of Lawndale, June 2023.			

5.11.2 REGULATORY SETTING

STATE

California General Plan Law

Government Code Section 65300 requires that each county and city adopt a General Plan "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning."

The General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map. It is a comprehensive long-term plan for the physical development of the county or city and is considered a "blueprint" for development. The General Plan must contain eight state-mandated elements, to the extent that they are relevant locally, which include: Land Use, Open Space, Conservation, Housing, Circulation, Noise, Safety, and Environmental Justice. It may also contain any other elements that the county or city wishes to include. The land use element designates the general location and intensity of designated land uses to accommodate housing, business, industry, open space, education, public buildings and grounds, recreation areas, and other land uses.

The 2017 General Plan Guidelines, established by the Governor's Office of Planning and Research (OPR) to assist local agencies in the preparation of their general plans, further describe the mandatory land use element as a guide to planners, the general public, and decision makers prescribing the ultimate pattern of development for the county or city.

California Housing Element Law

The Housing Element is one of the General Plan Elements that are mandated by the State of California (California Government Code Sections 65580 to 65589.8). California State law requires that the Housing Element consists of, "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing" (Government Code Section 65580).

State law requires that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

Subdivision Map Act

A subdivision is any division of land for the purpose of sale, lease or finance. The State of California Subdivision Map Act (Government Code Section 66410) regulates subdivisions throughout the State. The goals of the Subdivision Map Act are as follows:

- To encourage orderly community development by providing for the regulation and control of the design and improvement of a subdivision with proper consideration of its relationship to adjoining areas.

- To ensure that areas within the subdivision that are dedicated for public purposes will be properly improved by the subdivider so that they will not become an undue burden on the community.
- To protect the public and individual transferees from fraud and exploitation.

The Map Act allows cities flexibility in the processing of subdivisions. Lawndale controls this process through the subdivision regulations in the Municipal Code Title 16 (referred to as the Subdivision Ordinance). Regulations ensure that minimum requirements are adopted for the protection of the public health, safety and welfare; and that the subdivision includes adequate community improvements, municipal services, and other public facilities.

LOCAL

Southern California Association of Governments

Regional planning agencies such as the Southern California Association of Governments (SCAG) recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans that affect the City of Lawndale.

SCAG has evolved as the largest council of governments in the United States, functioning as the Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial) and 191 cities. The region encompasses an area more than 38,000 square miles. As the designated MPO, the Federal government mandates SCAG research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address concerns.

SCAG is responsible for the maintenance of a continuous, comprehensive and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program. SCAG is responsible for development of demographic projections and is also responsible for development of the integrated land use, housing, employment, transportation programs, measures, and strategies for the Air Quality Management Plan.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The passage of California Senate Bill (SB) 375 in 2008 requires that an MPO, such as SCAG, prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas emissions from automobiles and light duty trucks (Government Code Section 65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning and maximize transportation investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

On September 3, 2020, SCAG's Regional Council approved and fully adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect

SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Growth Forecasts

SCAG's Forecasting Section is responsible for producing socio-economic estimates and projections at multiple geographic levels and in multiple years. The Forecasting Section develops, refines, and maintains SCAG's regional and small area socio-economic forecasting/allocation models. Adopted 2020 RTP/SCS Growth Forecasts provide population, household and employment data for 2045. The socio-economic estimates and projections are used by Federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment (RHNA). SCAG's Adopted 2020 RTP/SCS Growth Forecasts are used to assess a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint; refer to Section 6.3, *Growth-Inducing Impacts*.

Intergovernmental Review

SCAG's Intergovernmental Review Section is responsible for performing consistency review of regionally significant local plans, projects, and programs with SCAG's adopted regional plans. The criteria for projects of regional significance are outlined in CEQA Guidelines Sections 15125 and 15206. The proposed Project is considered regionally significant; as such, Project consistency with SCAG's 2020 RTP/SCS policies is analyzed below.

Local Agency Formation Commission of Los Angeles County

In 1963, the State Legislature created a Local Agency Formation Commission (LAFCO) for each county, with the authority to regulate local agency boundary changes. Subsequently, the State has expanded LAFCO authority. The goals of LAFCO include preserving agricultural and open space land resources, and providing for efficient delivery of services. The Los Angeles LAFCO has authority over land use decisions in the County of Los Angeles affecting local agency boundaries. Its authority extends to the incorporated cities, including annexation of County lands into a city, and special districts within the County. The City of Lawndale is adjacent to an unincorporated area of Los Angeles County.

In addition, LAFCO conducts Municipal Service Reviews (MSRs) for services within its jurisdiction. An MSR typically includes a review of existing municipal services provided by a local agency and its infrastructure needs and deficiencies. It also evaluates financing constraints and opportunities, management efficiencies, opportunities for rate restructuring and shared facilities, local accountability and governance, and other issues.

City of Lawndale General Plan

The City's General Plan was last comprehensively updated in 1992, the Housing Element was updated in 2022 (in accordance with state housing law). The 1992 General Plan contains the following State-mandated and optional elements:

- Land Use Element
- Circulation Element
- Safety Element
- Economic Development Element
- Noise Element
- Open Space Element
- Conservation Element
- Air Quality Management Element
- Housing Element

The General Plan is a planning document used to guide City growth and development for the immediate future. The General Plan consists of numerous elements and policies that work to shape the future changes in the City. The Land Use Element in the 1992 General Plan establishes the planned land use pattern for Lawndale based primarily on the community's vision and goals for the future. Decision-makers and community members can look to the Land Use Element to understand the type of development allowed across different locations within Lawndale.

The Land Use Element designates the following land uses for the City; refer to Figure 3-3, *Existing General Plan Land Use Map*.

Single-Family Low Density: Permits a density range of 0-8.9 dwelling units per acre. This category is intended for single-family detached units on a minimum 5,000-square foot lot. Permits single-family detached homes and ancillary uses.

Single-Family Medium Density: Permits a density of 8.9-17.6 dwelling units per acre. This category is only intended to be applied to the areas of Lawndale where the predominate use is existing single-family units on 2,500-square foot lots. Permits single-family detached homes on 2,500-square foot lots and ancillary uses.

Multi-Family Low Density: Permits a density of 8.9 dwelling units per acre to 17.6 dwelling units per acre and allows two units on a minimum 5,000-square foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes, or any combination of the above and ancillary uses.

Multi-Family Medium Density: Permits a density range of 17.6 dwelling units per acre to 33 dwelling units per acre, on a minimum 5,000-square foot lot. Permits single-family detached, duplex/double unit, condominiums, townhomes, apartments, manufactured housing, or any combination of the above if deemed appropriate and compatible with surrounding land uses, and ancillary uses.

General Commercial: This designation provides the community with a wide variety of retail shops, restaurants, services, and office uses to meet the daily needs of the residents. The permitted floor area ratio, not to exceed 1.0, unless modified by the Hawthorne Boulevard Corridor Specific Plan.

Downtown Commercial: The purpose of this designation is to encourage urban nodes with commercial activity. This designation is applied specifically to the northerly side of the Hawthorne Boulevard and Manhattan Beach Boulevard intersection, and on the southerly side of the Marine Avenue and Hawthorne Boulevard intersection (see Hawthorne Boulevard Corridor Specific Plan).

Specialty Commercial: This designation can apply to sites that are a minimum five (5) acres in size and are located so as to be easily accessible and visible from major transportation corridors. The uses should have

a central theme and attract customers from outside the City as well as within Lawndale. Examples of suitable specialty commercial uses are a complex of stores catering to major household purchases, such as furniture, appliances, carpets, etc.; a variety of factory outlet stores; or assorted entertainment and eating establishments. The floor area ratio shall not exceed 0.3.

Light Industrial: This designation permits light manufacturing, assembly, packaging, fabrication, and processing of materials into finished products rather than the conversion of raw materials. The industrial activity shall be conducted primarily within structures and outside storage areas and assembly activity should be limited. The floor area ratio shall not exceed 0.5.

Open Space: This designation includes public parks, parks that are part of school sites, public and private outdoor recreational facilities, and landscaped open space areas.

Public Facilities: This category includes public school sites; Atchison, Topeka and Santa Fe Railroad right-of-way; civic center; public maintenance yards; utility easements; library; and Prairie Avenue Recreation Center uses.

Public Facilities Overlay: This overlay is intended to identify existing and potential sites that are suitable for a public park, recreational facility, or any other public facility building or use. In the area adjacent to the Lawndale Civic Center, this overlay is intended to identify areas where possible expansion of City Hall and/or future public uses can occur.

2021-2029 Housing Element

The City of Lawndale has updated and adopted their Housing Element for the Sixth Cycle RHNA: 2021-2029 Housing Element. The Lawndale 2021-2029 Housing Element identifies strategies and programs that focus on:

- Ensure that a broad range of housing types are provided to meet the needs of the existing and future residents;
- Ensure that housing is maintained and preserved;
- Increase opportunities for homeownership;
- Ensure the availability of housing-related services for special needs groups; and
- Affirmatively furthering fair housing.

The City introduced two new mechanisms to allow for residential development to be created to implement the Housing Element on sites considered viable for housing development. The first is “Housing Overlay 100”, which will be applied to 16 nonresidential sites outside of the Hawthorne Boulevard Specific Plan area and allow for residential densities of up to 100 dwelling units per acre. The second is “Housing Overlay 150” which will be applied to 68 nonresidential sites inside the Hawthorne Boulevard Specific Plan area, and will allow for residential densities up to 150 dwelling units per acre.

Hawthorne Boulevard Specific Plan

The Hawthorne Boulevard Specific Plan (HBSP) oversees the development of the Hawthorne Boulevard corridor and the north side of both Artesia Boulevard and Redondo Beach Boulevard (see Figure 3-4,

Hawthorne Boulevard Specific Plan Map). The HBSP acts as a tool for implementing the goals and policies of the General Plan through the regulation of use, density, height, and other design standards to achieve the overall vision for the area. The Specific Plan was originally adopted in June 1999 and has undergone various amendments since its adoption. The Specific Plan includes General Commercial, Downtown Commercial, Public Facilities and Multi-Family Medium land use designations.

Hawthorne Boulevard serves as the City's primary transportation route, corridor of economic activity, and the community focal point. It has been, and continues to be, the City's central artery for circulation, commerce, employment, and social activity. Hawthorne Boulevard is oriented in a north-south direction, connecting the City of Lawndale with the cities of Hawthorne in the north and Torrance in the south.

City of Lawndale Zoning Ordinance

The City's Zoning Ordinance is codified as Title 17, *Zoning*, of the Lawndale Municipal Code. The stated purpose of Title 17 is to designate, regulate, and restrict the location and use of buildings, structures, and land for residence, commerce, trade, industry, or other purposes; to regulate and limit the height, number of stories, and size of buildings and other structures hereafter erected or altered; to regulate and determine the size of yards and other open spaces; and to regulate and limit the density of population and, for said purposes, to divide the city into zones of such number, shape, and area as may be deemed best suited to carry out these regulations and to provide for their enforcement, in accordance with the comprehensive general plan.

Chapter 17.28, *Special Use Permit*, regulates the issuance of Special Use Permits (SUP). Land uses that require a SUP generally have a unique and distinct impact on the area in which they are located or are capable of impacts to adjacent properties unless given special review and conditions. SUPs may be approved, conditionally approved, or denied. Before granting a SUP, the approving body must find that the proposed project meets the conditions set forth in Section 17.28.014, *Prerequisite Conditions,* including, but not limited to, the presence of site features required to adjust the proposed use with the land and uses in the neighborhood, and consistency with the General Plan. In addition, all SUPs must meet the standard conditions set forth in Section 17.28.105, *Standard Conditions*, including, but not limited to, the provision of adequate exterior lighting for parking areas, provided such lighting does not disturb surrounding residential or commercial areas.

Chapter 17.30, *Design Review*, establishes a design review evaluation procedure that is intended to support orderly development by ensuring that proposed residential structures meet all aspects of the Zoning Code, are harmonious with the surrounding area within residential zones, and do not pose a threat to the public health, safety and general welfare of the City and its citizens. The design review procedure is decided upon by either the Community Development Director or Planning Commission, depending on the type of development and is decided according to design criteria established in Section 17.30.040, *Design Criteria*, which includes, but is not limited to: building height, bulk and other design features; site layout, orientation and location of structures; illumination and landscaping; respect for natural terrain and landscape; and substantial compliance with adopted design guidelines.

City of Lawndale Residential Development Standards and Design Guidelines

Adopted in 2019, the City of Lawndale Residential Development Standards and Design Guidelines contains both residential development standards and design guidelines intended to improve the quality of life throughout the City's residential neighborhoods; ensure that new development is compatible with surrounding developments; and assists the public in understanding and implementing principles of design.

5.11.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions relating to land use and relevant planning. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Physically divide an established community (refer to Impact Statement LU-1); and
- Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (refer to Impact Statement LU-2).

5.11.4 IMPACTS AND MITIGATION MEASURES

The General Plan Update is a comprehensive update of all of the Elements of the General Plan. The proposed land use plan identifies the type, location, and density/intensity of future development in the City; refer to Figure 3-4, *General Plan Update Land Use Map*. The proposed land use plan designates all land in the Planning Area to one of the land use designations below.

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Industrial
- Open Space
- Public Facilities
- Hawthorne Boulevard Specific Plan

Based on the proposed land use designations, density and intensity permitted for each parcel, and associated development assumptions, the proposed land plan would provide for increased development over existing (2022) conditions by 3,942 additional dwelling units and 808,864 additional square feet of non-residential uses; refer to Table 3-4.

LU-1: Would the project physically divide an established community?

Impact Analysis: The proposed General Plan Update establishes the City's vision for future growth and development. Goal LU-1 of the General Plan Update aims to achieve "*A community with a fiscally sustainable mix of land uses that meets the diverse needs of Lawndale residents, offers a variety of housing, employment opportunities, and support the provision of public services.*" The land uses allowed under the proposed General Plan (Figure 3-4 in Section 3.0, *Project Description*) provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area, but would not create physical division within the community. Overall, the proposed Project would provide new development opportunities to support the vision for development consistent with the General Plan

Update and the State's Housing Element Law, including accommodating the City's RHNA. This is primarily accommodated through the implementation of the "Housing Opportunity Overlay" on sites currently identified for non-residential development and through the Hawthorne Boulevard Specific Plan.

The Project does not introduce new roadways or new or significantly expanded infrastructure that would divide an established community. The General Plan Update Land Use Element includes policies and actions to support cohesive development that would not physically divide an established community. Specifically, Policy LU-2.1 would encourage the preservation of the basic pattern of existing land uses, preserving residential neighborhoods, while providing for the enhancement of mixed-use corridors. Policy LU-3.1 considers as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area. Action LU-3c, through the development review process, evaluates development proposals for land use and transportation network compatibility with existing surrounding or abutting development or neighborhoods.

The policies and actions listed below would ensure that future development is compatible with adjacent communities and land issues. The proposed General Plan would have a less than significant impact associated with the physical division of an established community.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-2.1 **Existing Land Use Pattern.** Strive to maintain the basic pattern of existing land uses, preserving residential neighborhoods, while providing for enhancement of mixed-use corridors to accommodate desirable redevelopment plans and improve economic sustainability.

Policy LU-3.1 **Surrounding Uses.** Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3b Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Action LU-3c Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Policy LU-4.3: **Site Planning.** Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Action LU-4e: Implement the City's existing development standards, or where not in place, create new standards (either through an update to the Zoning Code or update to the Hawthorne Boulevard Specific Plan or other regulating tool) to regulate new construction and revisions to existing buildings. In particular, new development standards shall be created for higher density stand-alone residential projects and mixed-use projects to ensure that quality infill developments can be created within the areas identified for focused growth.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

LU-2: Would the project conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis:

STATE PLANS

The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. Discussion of the proposed General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, transportation, water quality, etc.) is provided in the relevant chapters of this Draft EIR. The State would continue to have authority over any State-owned lands in the vicinity of the City and the proposed General Plan Update would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects.

REGIONAL PLANS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted 2020 RTP/SCS. SCAG refers to CEQA Guidelines Section 15206, Projects of Statewide, Regional or Areawide Significance, in determining whether a project meets the criteria to be deemed regionally significant. The following criteria is relevant to the Project:

> *Criteria 1: A proposed local general plan, element, or amendment thereof for which an EIR was prepared.*

The proposed Project involves components specified in Criteria 1; the General Plan Update is a comprehensive update of the 1992 General Plan. Therefore, it is concluded that the Project is regionally significant. SCAG's 2020 RTP/SCS provides a framework for regional land use and transportation policy within the SCAG region through the horizon year of 2045. SCAG's 2020 RTP/SCS goals and policies were adopted to help focus future investments on the best-performing projects and strategies to preserve,

maintain and optimize the performance of the existing transportation system. The goals of Connect SoCal fall into four core categories: economy, mobility, environment and healthy/complete communities. An analysis of the proposed Project's consistency with the relevant SCAG 2020 RTP/SCS goals adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 5.8, *Greenhouse Gas Emissions*, Table 5.8-5, *Project Consistency with the 2020-2045 RTP/SCS*. As demonstrated in Table 5.8-5, the Project would be consistent with SCAG's regional planning efforts and a less than significant impact would occur in this regard.

LOCAL PLANS

As set forth by State law, the General Plan serves as the primary planning document for the City and subordinate documents and plans would be updated to be consistent with the General Plan. Similar to the existing General Plan, the proposed General Plan Update focuses on a balanced land use pattern, creating a community where new development blends with existing neighborhoods, and promoting the City as a desirable place to live and work. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection, and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan Update would require modifications to the City's Zoning Code to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely alter portions of the Lawndale Municipal Code that were adopted to mitigate an environmental effect.

It is noted, the Hawthorne Boulevard Specific Plan (HBSP) applies to 95 acres of the City located along Hawthorne Boulevard. The Specific Plan was originally adopted in June 1999 and has undergone various amendments since its adoption. The Specific Plan includes General Commercial, Downtown Commercial, Public Facilities and Multi-Family Medium land use designations The General Plan Update Land Use Map (Figure 3-4) includes the addition of the land use designation of "Hawthorne Boulevard Specific Plan" for the HBSP. As part of the implementation of the General Plan Update and 2021-2029 Housing Element, the HBSP would be updated. Given the future land use changes expected to be proposed to the HBSP, the General Plan 2045 Buildout (Table 3-3) analyzes the HBSP as developing with an additional 3,540 dwelling units and 310,376 square feet of non-residential development.

Subsequent development and infrastructure projects would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of future development projects. The policies listed below would ensure that the General Plan Update does not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation

options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-1.6: **Uses to Meet Daily Needs.** Encourage uses that meet daily needs, such as grocery stores, local-serving restaurants, and other businesses and activities, within walking distance of residences to reduce the frequency and length of vehicle trips.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.2: **Focused Areas for New Development.** Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-3.1: **Surrounding Uses.** Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3b: Ensure all projects are reviewed and processed per the California Environmental Quality Act (CEQA) Guidelines.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Policy LU-4.3: **Site Planning.** Require that new development use site planning techniques (e.g., the placement of proposed structures, building materials, landscaping, access ways) that consider the physical characteristics of its site and surrounding land uses, maximize access to sunlight and natural airflow between buildings, and optimize energy efficiency.

Policy LU-4.4: **Pedestrian-Scale Amenities.** Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

Policy LU-4.7: **Landscaping.** Encourage, to the maximum extent feasible, project and streetscape landscaping be designed to include drought tolerant, native California plant species and the use of a drip, micro-spray or other low-flow irrigation systems.

Action LU-4e: Continue to implement the City's existing development standards, or create new standards if appropriate, to regulate new construction and revisions to existing buildings. New standards shall be created for higher density stand-alone residential projects and mixed-use projects to promote quality infill developments.

Action LU-4f: Seek grant funding ("greening" grants) to help offset the cost of landscape improvements along community corridors, with a focus on Hawthorne Boulevard.

MOBILITY ELEMENT

Policy M-1.7: **Traffic Calming on Local Streets.** Encourage traffic calming strategies, such as diverters, median islands, and speed humps, and incorporation of traffic calming design in residential and school areas to slow traffic and promote safety, while not reducing parking supply.

Action M-1e: Monitor cut-through traffic on local streets, especially along residential areas and schools, and where appropriate evaluate the applicability of traffic calming tools and implement improvements as necessary.

Policy M-2.2: **Agency Coordination.** Coordinate with neighboring cities, telecom companies, and regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.

Policy M-2.3: **Facility Connections.** Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to relate to those in neighboring jurisdictions.

Action M-2a: Participate in regional planning forums to ensure that the City's concerns are considered at the regional level.

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: **Multimodal Connectivity.** Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: **Streetscape Improvements.** Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: **Safe Routes to School.** Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive

manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: **Transit Use.** Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: **Improve Local Public Transit Service.** Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: **Transit Facilities.** Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: **C (Green) Line Service.** Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: **C (Green) Line Stations.** Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Policy M-5.6: **Effects of New Technologies on Transit Use.** Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

ActionM-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Policy M-6.1: **Bicycle Master Plan.** Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: **Local Travel Network.** Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: **Sidewalk and Bikeway Gaps.** Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: **Bicycle/Pedestrian Facilities at New Developments.** Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: **Effects of New Technologies on Active Transportation.** Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-7.1: **Local Truck Routes.** Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.

Policy M-7.2: **Roadway Design.** Maintain roadway design standards to facilitate access to light industrial and manufacturing areas along designated truck routes.

Action M-7a: Review and update the City's designated truck routes as needed while considering the potential mobility conflicts and the location of sensitive land uses in the City.

Policy M-9.2: **Transportation Demand Management.** Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3: **Regional Coordination.** Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4: **New Development.** Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a: Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b: Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: **Active Transportation Trails.** Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: **Service Area Radius.** Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents

to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-2.4: **Source Reduction and Recycling Efforts.** Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: **Organic Waste.** Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Policy RM-4.1: **Regional Cooperation.** Support regional efforts, including those organized through the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), the South Bay Cities Council of Governments (SBCCOG), and the California Air Resource Board (CARB) to implement the regional Air Quality Management Plan.

Policy RM-4.2: **Measurement and Enforcement.** Coordinate with the California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) to support their ability to properly measure air quality at emission sources and enforce the standards of the Clean Air Act.

Policy RM-4.3: **GHG Emissions.** Align the City's local GHG reduction targets with the statewide GHG reduction targets of Assembly Bill 32, and align the City's GHG reduction goal with the statewide GHG reduction goal of Executive Order S-03-05.

Policy RM-4.4: **Transportation Options.** Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability.** Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Policy RM-4.8: **Mitigation.** Require the implementation of relevant mitigation measures for all future development upon identification of potential air quality impacts.

Policy RM-4.9: **GHG Reduction.** Consider and adopt new local policies and programs that will help to provide energy efficient alternatives to fossil fuel use and reduce consumption in order to reduce greenhouse gas emissions consistent with the local measures identified in the City of Lawndale Climate Action Plan.

Policy RM-4.10: **Public Engagement.** Promote regional air quality programs in order to inform the public on regional air quality concerns and encourage the engagement of all residents in future planning decisions related to air quality.

Action RM-4a: Implement the local GHG reduction measures identified in the City of Lawndale Climate Action Plan (CAP), participate in future updates of the SBCCOG Climate Action Plan, and perform on-going monitoring and reporting of GHG reduction impacts. Develop a Climate Action Team to support and guide the City's efforts to conserve energy and reduce emissions. Work with the SBCCOG and/or other local, Regional, State, and Federal agencies or utility to obtain funding necessary to implement, monitor, and report the CAP measures.

Action RM-4b: As applicable, review new industrial and commercial development projects during the CEQA process for potential air quality impacts to residences and other sensitive receptors. Ensure that mitigation measures and best management practices are implemented to reduce significant emissions of criteria pollutants.

Action RM-4c: Review development, infrastructure, and planning projects for consistency with SCAQMD requirements during the CEQA review process. Require project applicants to prepare air quality analyses to address SCAQMD and General Plan requirements, as appropriate, which include analysis and identification of:

1. Air pollutant emissions associated with the project during construction, project operation, and cumulative conditions.
2. Potential exposure of sensitive receptors to toxic air contaminants.
3. Significant air quality impacts associated with the project for construction, project operation, and cumulative conditions.
4. Mitigation measures to reduce significant impacts to less than significant or the maximum extent feasible where impacts cannot be mitigated to less than significant.

Action RM-4d: Work with the South Coast Air Quality Management District, Southern California Association of Governments, the South Bay Cities Council of Governments, and the

California Air Resource Board to implement programs aimed at improving regional air quality.

Action RM-4e: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations (CCR), Title 24 standards as well as the energy efficiency standards established by the Lawndale Municipal Code.

Action RM-4f: Provide the necessary facilities and infrastructure to facilitate the use of low or zero-emission vehicles such as electric vehicle charging facilities at key City facilities as operations necessitate and/or as funding becomes available.

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Action RM-4i: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Action RM-4j: Encourage multi-family residential and non-residential development to increase the use of higher-albedo materials for surfaces including roofs, parking areas, driveways, roads, and sidewalks. Encourage developments with parking lot areas to shade these areas with vegetation or solar panels when appropriate. Support various programs to plant and maintain trees, which can also contribute to a reduction of urban heat islands.

Action RM-4k: Future development projects will be required to demonstrate consistency with SCAQMD construction emission thresholds. Where emissions from individual projects exceed SCAQMD thresholds, the following actions should be incorporated as necessary to minimize impacts. These measures do not exclude the use of other, equally effective mitigation measures as determined by a project specific Air Quality Assessment.

- Require all off-road diesel equipment greater than 50 horsepower (hp) used for this Project to meet USEPA Tier 4 final off-road emission standards or equivalent. Such equipment shall be outfitted with Best Available Control Technology (BACT) devices including a California Air Resources Board Certified Level 3 Diesel Particulate Filter (DPF) or equivalent. The DPF reduces diesel particulate matter and NOx emissions during construction activities.
- Require a minimum of 50 percent of construction debris be diverted for recycling.
- Require building materials to contain a minimum 10 percent recycled content.
- Require materials such as paints, primers, sealants, coatings, and glues to have a low volatile organic compound concentration compared to conventional products. If low VOC materials are not available, architectural coating phasing should be extended sufficiently to reduce the daily emissions of VOCs.

Action RM-4l: Future development projects will be required to demonstrate consistency with SCAQMD's operational emission thresholds. For projects where operational emissions exceed regulatory thresholds, the following measures may be used to reduce impacts. Note the following measures are not all inclusive and developers have the option to add or substitute measures that are equally or more appropriate for the scope of the project.

- Develop a project specific TDM program for residents and/or employees that provides opportunities for carpool/vanpools.
- Provide onsite solar/renewable energy in excess of regulatory requirements.
- Require that owners/tenants of non-residential or multi-family residential developments use architectural coatings that are 10 grams per liter or less when repainting/repairing properties.
- Require drip irrigation and irrigation sensor units that prevent watering during rain storms.
- Ensure all parking areas are wired for capability of future EV charging and include EV charging stations that exceed regulatory requirements.

Policy RM-5.1: **Compliance with State Legislation.** Comply with all State requirements regarding the generation of power and encourage energy providers to investigate the use or expansion of renewable sources of energy.

Policy RM-5.2: **Green Building Standards Code.** Ensure that new construction and major redevelopment complies with the most current version of the California Green Building Standards Code.

Policy RM-5.3: **Renewable Energy.** Promote the development and use of renewable energy resources to reduce dependency on fossil fuels.

Policy RM-5.4: **Energy-Efficient Materials.** Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: **Energy Conservation.** Promote energy conservation and recycling by the public and private sectors.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade

patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Action RM-5d: Promote the CEC Building Energy Benchmarking Program (AB 802) on the City's website to help benchmark and monitor energy use for participating businesses seeking to increase energy efficiency and realize cost savings.

Action RM-5e: Identify and reduce government constraints to installation of renewable energy infrastructure and electric vehicle charging stations, as feasible, through incentives such as, streamlined permitting, and expedited inspection times.

Action RM-5f: Consider participation in a Community Choice Aggregation program, such as Clean Power Alliance, to help meet the City's energy objectives.

Action RM-5g: Use the City's website to promote existing incentivized programs such as Energy Upgrade California, financing programs such as Properly Assessed Clean Energy (PACE), and energy audits through state programs.

Action RM-5h: Partner with SBCCOG and relevant utilities on outreach events and to obtain educational content and promote on the City's website.

PUBLIC SAFETY ELEMENT

Policy PS-7.1: **Community Preparedness.** Promote a well-prepared City that can effectively overcome natural disasters and scarcity of resources due to climate change.

Policy PS-7.2: **Collaboration.** Collaborate with local, regional, State and/or Federal jurisdictions and agencies on climate resiliency and adaptation strategies.

Policy PS-7.3: **Ecological Recovery.** Coordinate with Federal, State, and local agencies to establish ecological recovery programs.

Policy PS-7.4: **Air Pollution**. Work with responsible Federal, State, and County agencies to decrease air pollution emissions occurring within the air basin to reduce the risk posed by air pollution.

Policy PS-7.5: **Energy Supply.** Promote plans and programs that increase sustainable energy sources.

Policy PS-7.6: **Drought Preparation.** Implement necessary actions and programs to improve drought preparation and response for the most vulnerable community members.

Policy PS-7.7: **Cooling Centers.** Designate public buildings, specific private buildings, or institutions with air conditioning as public cooling shelters; extend hours at air-conditioned sites during periods of extreme heat or power outage (if the site is supported by a backup generator).

Policy PS-7.8: **Storms.** Provide access to flood protection resources and services (signage, sandbags, etc.) as feasible at designated public facilities during and after extreme weather events.

Policy PS-7.9: **Special Assistance.** Address the needs of individuals with limited mobility or limited access to transportation for access to safe and comfortable shelter during extreme heat events or other severe weather events.

Policy PS-7.10: **Leadership.** Demonstrate leadership in local climate planning efforts through a range of tangible actions and policies at the municipal operations level.

Policy PS-7.11: **Greenhouse Gas Reductions.** Reduce communitywide greenhouse gas emissions locally by actively supporting regional efforts to reduce greenhouse gases throughout the county.

Policy PS-7.12: **Extreme Heat Vulnerabilities.** Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.

Policy PS-7.13: **Ongoing Monitoring.** Monitor climate change-related effects with local, regional, state, and/or Federal partners to provide information of effectiveness of existing infrastructure and programs.

Action PS-7a: Provide information and resources to the public and businesses regarding steps the City is taking to address the issue of climate change.

Action PS-7b: Expand the use of energy-efficient lighting, such as LEDs for City-owned light facilities.

Action PS-7c: Consider purchasing only electric or alternative-energy vehicles for the City vehicle fleet, as appropriate, based on the intended use of the vehicle.

Action PS-7d: Evaluate the feasibility for government-constructed and/or -operated new development to exceed the California Green Building Standards Code CalGreen Tier 1, or successor program, standards.

Action PS-7e: Promote the use of sustainable and carbon-neutral energy sources in new development.

Action PS-7f Explore using renewable energy and clean generation technologies such as solar, wind, biogas, or fuel cells to power City facilities where appropriate.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.11.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for land use and planning considers the SCAG region and the City.

Would the project, combined with other related cumulative projects, physically divide an established community?

Impact Analysis: Development of cumulative projects in the City of Lawndale would be required to mitigate land use impacts on a project-by-project basis. Each project would be evaluated for consistency with the project site's General Plan land use designation and zoning, adopted General Plan goals, policies, and actions, and other applicable regional land use plans, such as SCAG's RTP/SCS. As analyzed above, the proposed General Plan Update would result in less than significant impact related to land use and relevant planning. Therefore, the incremental impact of the proposed Project, when considered in combination with development within the City and region, would not result in cumulatively considerable land use impacts.

The land uses allowed under the proposed General Plan provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area, but would not create physical division within the community. The proposed General Plan Update does not include any new roadways, infrastructure, or other features that would divide existing communities. Each individual development project would be reviewed to determine its consistency and compatibility with the surrounding area and its potential to physically divide an established community. As the Project would not physically divide an established community, the Project's incremental effects would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Impact Analysis: As discussed above, the proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. As demonstrated above, the proposed Project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection, and would not remove or conflict with City plans, policies, or regulations adopted for environmental protection. The proposed General Plan Update would require modifications to the City's Zoning Code to provide consistency between the General Plan and zoning; however, these modifications will not remove or adversely alter portions of the Lawndale Municipal Code that were adopted to mitigate an environmental effect.

Similar to future development associated with the proposed Project, cumulative development projects would be evaluated for consistency with the project site's General Plan land use designation and zoning;

General Plan goals, policies, and actions; and other applicable plans for the purpose of avoiding or mitigating an environmental effect. As analyzed above, the proposed Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Thus, the proposed Project's incremental effects would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.11.6 SIGNIFICANT UNAVOIDABLE IMPACTS

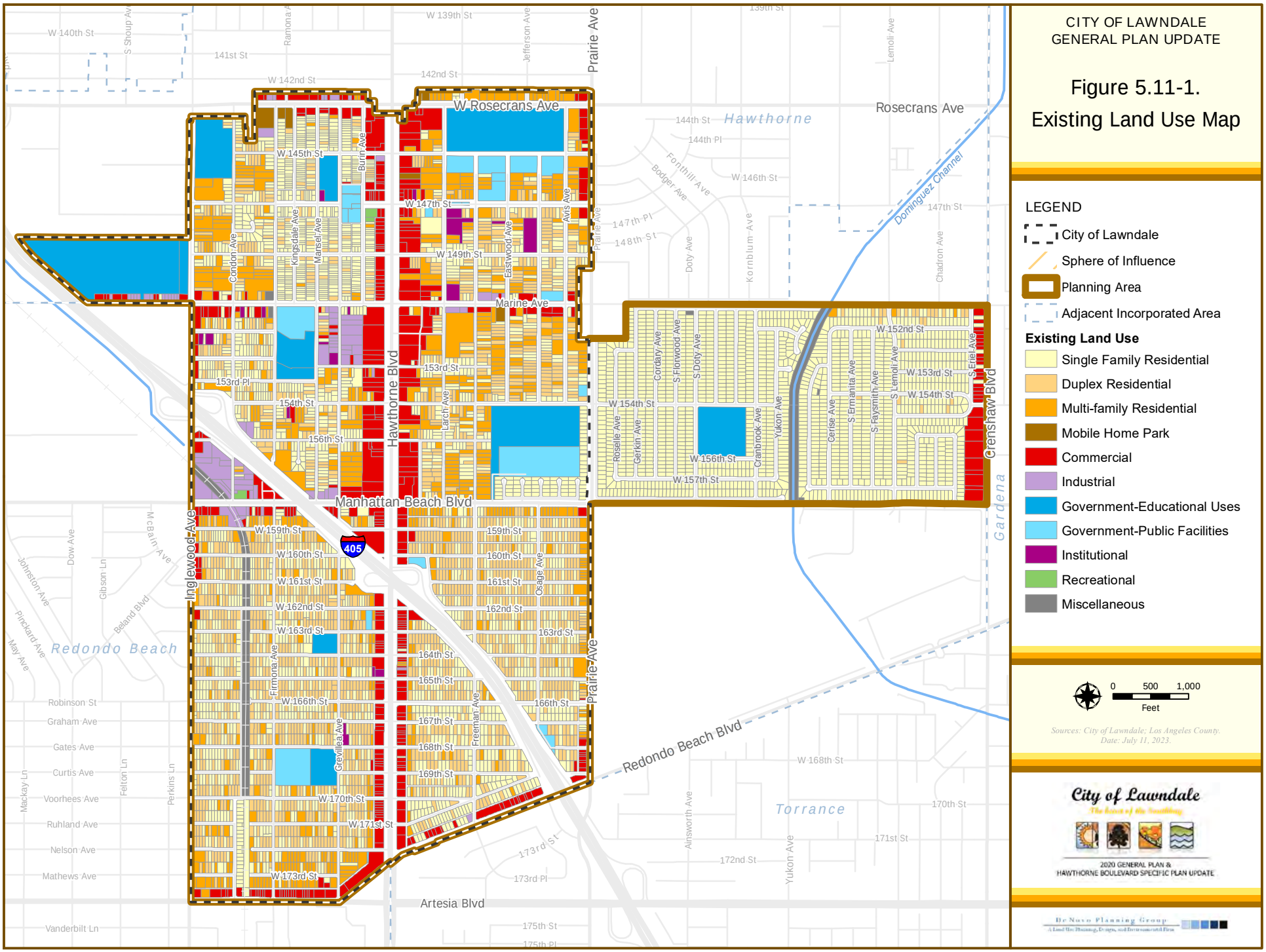
Land use and planning impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable land use and planning impacts would occur as a result of the General Plan Update.

5.11.7 REFERENCES

City of Lawndale, *2021-2029 Housing Element*, adopted February 2022.

State of California, *Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021-2023 with 2020 Census Benchmark*, 2023.

Southern California Association of Governments, *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, adopted September 3, 2020.


CITY OF LAWNDALE
GENERAL PLAN UPDATE
Figure 5.11-1.
Existing Land Use Map
LEGEND
City of Lawndale
Sphere of Influence
Planning Area
Adjacent Incorporated Area
Existing Land Use
Single Family Residential
Duplex Residential
Multi-family Residential
Mobile Home Park
Commercial
Industrial
Government-Educational Uses
Government-Public Facilities
Institutional
Recreational
Miscellaneous
0 500 1,000
Feet
Sources: City of Lawndale; Los Angeles County.
Date: July 11, 2023.
City of Lawndale
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE
W Rosecrans Ave
Rosecrans Ave
Hawthorne
Prairie Ave
Hawthorne Blvd
Crenshaw Blvd
Manhattan Beach Blvd
Inglewood Ave
Redondo Beach Blvd
Artesia Blvd
Redondo Beach
Torrance
Gardena
Dominguez Channel
405
W 140th St
141st St
W 142nd St
W 139th St
142nd St
144th St
144th Pl
W 146th St
147th St
147th Pl
148th St
W 145th St
W 147th St
W 149th St
Marine Ave
153rd St
153rd Pl
154th St
156th St
W 152nd St
W 153rd St
W 154th St
W 156th St
W 157th St
W 159th St
W 160th St
W 161st St
W 162nd St
W 163rd St
159th St
160th St
161st St
162nd St
163rd St
164th St
165th St
166th St
167th St
168th St
169th St
W 166th St
W 170th St
W 171st St
W 173rd St
173rd St
173rd Pl
W 168th St
170th St
171st St
172nd St
175th St
175th Pl
Robinson St
Graham Ave
Gates Ave
Curtis Ave
Voorhees Ave
Ruhland Ave
Nelson Ave
Mathews Ave
Vanderbilt Ln
Burin Ave
Condon Ave
Kingsdale Ave
Mansel Ave
Avis Ave
Eastwood Ave
Larch Ave
Firmona Ave
Grevillea Ave
Freeman Ave
Osage Ave
Cordary Ave
S Florwood Ave
S Doty Ave
Roselle Ave
Gerkin Ave
Cranbrook Ave
Yukon Ave
Cerise Ave
S Ermanita Ave
S Raysmith Ave
S Lemoli Ave
S Eriel Ave
Fonthill Ave
Bodger Ave
Doty Ave
Kornblum Ave
Chadron Ave
Ainsworth Ave
Yukon Ave
Lemoli Ave
Jefferson Ave
Ramona Ave
S Shoup Ave
Dow Ave
McBain Ave
Johnston Ave
Gibson Ln
Beland Blvd
Pinckard Ave
May Ave
Mackay Ln
Felton Ln
Perkins Ln

This page intentionally left blank.

5.12 MINERAL RESOURCES

This section identifies the existing mineral resource conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

5.12.1 ENVIRONMENTAL SETTING

MINERAL RESOURCE CLASSIFICATION

Pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board oversees the Mineral Resource Zone (MRZ) classification system. The MRZ system characterizes both the location and known/presumed economic value of underlying mineral resources. The mineral resource classification system uses four main MRZs based on the degree of available geologic information, the likelihood of significant mineral resource occurrence, and the known or inferred quantity of significant mineral resources. The four classifications are described in Table 5-12-1, *Mineral Resources Classification System*.

Table 5.12-1
Mineral Resources Classification System

Classification	Description
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated.
MRZ-4	Areas where available information is inadequate for assignment to any other MRZ classification.
Source: California Department of Conservation, *Guidelines for Classification and Designation of Mineral Lands*, 2023a.	

MINERAL RESOURCES

Mineral resources include commercially viable oil and gas deposits, and nonfuel mineral resources deposits. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate, including sand, gravel, and crushed stone. California is the largest producer of sand and gravel in the nation. Figure 5.12-1, *Mineral Resource Zones*, shows resources by classification within the Planning Area. The Planning Area is designated as MRZ-1 and MRZ-3. MRZ-1 classifies areas where adequate information indicates that no significant mineral deposits are present. MRZ-3 is a classification for areas containing known or inferred mineral occurrences of undetermined mineral resource significance. MRZ-1 is found throughout the entire Planning Area, including the Sphere of Influence (SOI), and MRZ-3 is found in the southwestern corner of the Planning Area, within City limits.

LOCATION OF PERMITTED AGGREGATE MINES

The California Office of Mine Reclamation periodically publishes a list of qualified permitted aggregate mines regulated under SMARA that is generally referred to as the AB 3098 List. The Public Contract Code precludes mining operations that are not on the AB 3098 List from selling sand, gravel, aggregates or other mined materials to State or local agencies. As of March 2023, there are 26 aggregate mines on the AB 3098 list in Los Angeles County; none of the 26 listed mines are within the Planning Area (California Department of Conservation 2023b).

5.12.2 REGULATORY SETTING

STATE

Surface Mining and Reclamation Act of 1975

The California Department of Conservation Surface Mining and Reclamation Act of 1975 (Section 2710), also known as SMARA, provides a comprehensive surface mining and reclamation policy that permits the continued mining of minerals, as well as the protection and subsequent beneficial use of the mined and reclaimed land. The purpose of SMARA is to ensure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition and are readily adaptable for alternative land uses; that the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, wildlife, range and forage, and aesthetic enjoyment; and that residual hazards to public health and safety are eliminated. These goals are achieved through land use planning by allowing a jurisdiction to balance the economic benefits of resource reclamation with the need to provide other land uses.

If a use is proposed that might threaten the potential recovery of minerals from an area that has been classified MRZ-2, SMARA would require the jurisdiction to prepare a statement specifying its reasons for permitting the proposed use, provide public notice of these reasons, and forward a copy of the statement to the State Geologist and the State Mining and Geology Board (Cal. Pub. Res. Code Section 2762). Lands classified MRZ-2 are areas that contain identified mineral resources.

5.12.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to mineral resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state (refer to Impact Statement MR-1); and
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a general plan, specific plan, or other land use plan (refer to Impact Statement MR-2).

5.12.4 IMPACTS AND MITIGATION MEASURES

MR-1: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: The City has no known or identified mineral resources of regional or Statewide importance. As shown in Figure 5.12-1, the Planning Area is designated as MRZ-1 and MRZ-3. MRZ-1 classifies areas where adequate information indicates that no significant mineral deposits are present. MRZ-3 indicates that the significance of the mineral deposits is undetermined. MRZ-1 is found throughout the entire Planning Area, including the SOI, and MRZ-3 is found in the southwestern corner of the Planning Area, within City limits. The land within MRZ-3 is currently developed and is within a highly urbanized area. Given that this land has already been disturbed and developed, and that the Project does not propose any site-specific development, there is no potential for resource extraction from the MRZ-3 area.

There are no known mineral deposits or resources in the Planning Area that are of significant value to the region or the State. Therefore, implementation of the proposed General Plan Update would have a less than significant impact on this environmental topic, and no mitigation is required.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

MR-2: Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Impact Analysis: As shown in Figure 5.12-1, the Planning Area does not contain any "locally important mineral resource recovery sites." The Planning Area does not contain a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Implementation of the General Plan Update would not result in the loss of a designated mineral recovery site and as such, no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.12.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to mineral resources may occur.

Would the project, combined with other relative cumulative projects, result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact Analysis: The majority of land within the Planning Area is designated as MRZ-1, land where no significant mineral deposits are present, with a smaller portion designated as MRZ-3, land for which the significance of mineral resources cannot be determined. The land within the MRZ-3 is currently developed and is within a highly urbanized area, indicating there is little to no potential for resource extraction from the MRZ-3 area.

Further, there are no known mineral deposits or resources in the Planning Area that are of significant value to the region or the State. Therefore, implementation of the proposed General Plan Update, in combination with other relevant cumulative projects, would not contribute to cumulative impacts and impacts in this regard are not cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less than Significant Impact.

Would the project, combined with other relative cumulative projects, result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Impact Analysis: The Planning Area does not contain any locally-important mineral resource recovery sites delineated on local general plans, specific plans and other land use plans. As such, future development projects, in combination with other relative cumulative projects, would not result in the loss of availability of a locally-important mineral resource recovery site. Impacts would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.12.6 SIGNIFICANT UNAVOIDABLE IMPACTS

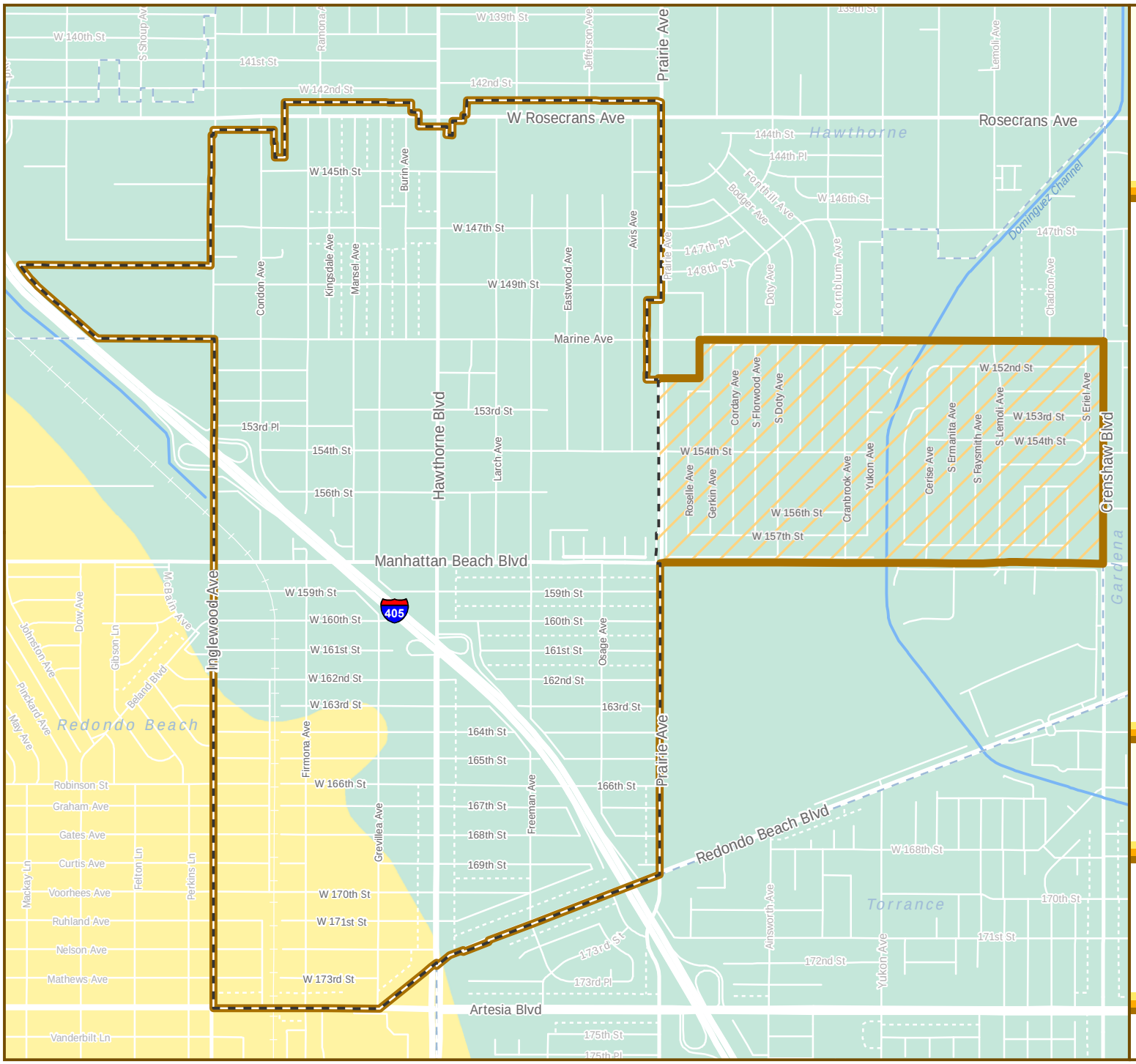
Mineral Resource impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable mineral resource impacts would occur as a result of the General Plan Update.

5.12.7 REFERENCES

California Department of Conservation (DOC), *Guidelines for Classification and Designation of Mineral Lands*, 2023a.

California Department of Conservation (DOC), Division of Mine Reclamation, *SAMARA Administration Units: AB 3098 List*, https://www.conservation.ca.gov/dmr/smara-mines, accessed March 9, 2023b.

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.12-1. Mineral Resource Zones

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area

Mineral Resource Zones

- MRZ-1: No significant mineral deposits present or likely
- MRZ-3: Mineral deposits present, significance unknown

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; California Department of Mines and Geology Open File Report 94-14, 1994. Date: June 22, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.13 NOISE

5.13.1 PURPOSE

This section identifies existing noise conditions within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon *General Plan Update Noise Impact Study – City of Lawndale*, prepared by MD Acoustics, LLC and dated July 12, 2023; refer to Appendix E, *Noise Impact Study*.

5.13.2 ENVIRONMENTAL SETTING

FUNDAMENTALS OF NOISE

Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting at 20 Hz to the high pitch of 20,000 Hz.

Sound Pressure Levels and Decibels

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square meter ($\mu N/m^2$), also called micro-Pascal (µPa). One µPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels abbreviated dB.

Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the single SPL. In other words, sound energy that is doubled produces a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound. When combining sound levels, estimates shown in Table 5.13-1, *Decibel Addition*, may be utilized.

Table 5.13-1
Decibel Addition

When Two Decibel Values Differ by:	Add This Amount to Higher Value	Example
0 or 1 dB	3 dB	70+69=73 dB
2 or 3 dB	2 dB	74+71=76 dB
4 to 9 dB	1 dB	66+60=67 dB
10 dB or more	0 dB	65+55=65 dB
Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.		

Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this analysis, as well as with most environmental documents, A-scale weighting is typically used and is reported in terms of the A-weighted decibel (dBA). The A-scale was designed to account for the frequency-dependent sensitivity of the human ear. Typical A-weighted noise levels are shown in Table 5.13-2, *Typical Noise Levels*.

In general, the human ear can barely perceive a change in the noise level of 3 dB. As shown in Table 5.13-3, *Perceived Changes in Noise Levels*, a change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

Table 5.13-2
Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor
	110	Rock Band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 3 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large Business Office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcasting studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Table 5.13-3
Perceived Changes in Noise Levels

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

Source: California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of ten (10) decibels to sound levels in the night between 10:00 p.m. and 7:00 a.m.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dBA: A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the California Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90, and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc., associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance

areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dBA level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Tonal Sounds

A pure tone sound is a sound produced at or near a single frequency. Laboratory tests have shown that humans are more perceptible to changes in sound levels of a pure tone. For a noise source to contain a "pure tone," there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to "stand out" against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contagious one-third octave bands by 5 dB for center frequencies of 500 Hertz (Hz) and above; by 8 dB for center frequencies between 160 and 400 Hz; and by 15 dB for center frequencies of 125 Hz or less.

Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet or more from a noise source. Wind, temperature, air humidity, and turbulence can further impact have far sound can travel.

Ground Absorption

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt, or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall

noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Sound Attenuation

Noise-related land use issues are typically composed of three basic elements: (1) the noise source, (2) a transmission path, and (3) a receiver.

The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. When the potential for a noise-related problem is present, either avoidance of the noise-related problem or noise control techniques should be selected to provide an acceptable noise environment for the receiver while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options are described below.

Noise Barriers

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. To achieve that reduction, the barrier must be high enough and long enough to block the line-of-sight of the vehicles on the road. A noise barrier can still achieve up to a 5 dBA noise level reduction when it is tall enough to barely allow a line-of-sight of the vehicles. A noise barrier is most effective when placed close to the noise source or receiver. When the noise barrier is an earthen berm instead of a wall, the noise attenuation can be increased by another 3 dBA.

Setbacks

Noise exposure may be reduced by increasing the setback distance between the noise source and the receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, and storage yards. The available noise attenuation from this technique is limited by the characteristics of the noise source but generally ranges between 4 and 6 dBA.

Site Design

Buildings can be placed on a property to shield other structures or areas affected by noise and to prevent an increase in noise levels caused by reflections. The use of one building to shield another can significantly reduce overall noise control costs, particularly if the shielding structure is insensitive to noise. An example would be placing a detached garage nearest the noise source to shield the house or backyard. Site design should guard against creating reflecting surfaces that may increase onsite noise levels. For example, two buildings placed at an angle facing a noise source may cause noise levels within that angle to increase by up to 3 dBA. The open end of U-shaped buildings should point away from noise sources for the same reason. Landscaping walls or noise barriers located within a development may inadvertently reflect noise to a noise-sensitive area unless carefully located.

Building Facades

When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through the acoustical design of building facades. Standard construction practices provide a noise reduction of 10 to 15 dBA for building facades with open windows, and a noise reduction of approximately 25 dBA when windows are closed; refer to Table 5.13-4, *Noise Reduction Afforded by Common Building*

Construction. An exterior-to-interior noise reduction of 25 dBA can be obtained by requiring that building design include adequate ventilation systems, which would allow windows facing a noise source to remain closed, even during periods of excessively warm weather.

Where greater noise reduction is required, acoustical treatment of the building facade may be necessary. Reducing relative window area is the most effective control technique, followed by providing acoustical glazing (e.g., thicker glass or increased air space between panes) within frames with low air infiltration rates, using fixed (i.e., non-movable) acoustical glazing, or eliminating windows. Noise transmitted through walls can be reduced by increasing wall mass (e.g., using stucco or brick in lieu of wood siding), or isolating wall members by using double or staggered stud walls, while noise transmitted through doorways can be lessened by reducing door area, using solid-core doors, or sealing door perimeters with suitable gaskets. Noise-reducing roof treatments include using plywood sheathing under roofing materials.

Table 5.13-4
Noise Reduction Afforded by Common Building Construction

Construction Type	Typical Occupancy	General Description	Range of Noise Reduction (dB)[1]
1	Residential, Commercial, Schools	Wood frame, stucco, or wood sheathing exterior. Interior drywall or plaster. Sliding glass windows, with windows partially open.	15-20
2	Same as 1 above	Same as 1 above, but with windows closed.	25-30
3	Commercial, Schools	Same as 2 above, but with fixed 0.25-inch plate glass windows.	30-35
4	Commercial, Industrial	Steel or concrete frame, curtain wall, or masonry exterior wall. Fixed 0.25-inch plate glass windows.	35-40
Source: California Department of Transportation (Caltrans), *California Airport Land Use Planning Handbook*, January 2002.			

Landscaping

While the use of trees and other vegetation is often thought to provide significant noise attenuation, approximately 100 feet of dense foliage – with no visual path extending through the foliage – is required to achieve a 5 dBA attenuation of traffic noise. Thus, the use of vegetation as a noise barrier is not considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.

Vegetation can be used, however, to acoustically "soften" intervening ground between a noise source and a receiver, increasing ground absorption of sound, and thus, increasing the attenuation of sound with distance. Planting trees and shrubs also offers aesthetic and psychological value, and it may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels would be largely unaffected.

GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and mainly exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. Several different methods are used to quantify vibration amplitude. Typical human reaction and effect on buildings due to ground-borne vibration is shown in Table 5.13-5, *Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration*.

PPV. Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS. Known as root mean squared (RMS) can be used to denote vibration amplitude.

VdB. A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

Table 5.13-5
Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration

Vibration Level Peak Particle Velocity (PPV)	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020.

Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

The California Department of Transportation has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and although the Project is not subject to these regulations, it serves as useful tools to evaluate vibration impacts.

Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation. As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. This drop-off rate can vary greatly depending on the soil, but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

TRAFFIC NOISE PREDICTION MODEL

The FHWA Highway Traffic Noise Prediction model (FHWA-RD 77-108) was used to model and compare existing traffic noise levels to General Plan 2045 Buildout noise levels. The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Roadway modeling assumptions utilized for the technical study are provided in Tables 8 and 9 of the Noise Impact Study provided in Appendix E. The vehicle mix indicates the percentage of automobiles, medium trucks, and heavy trucks for each segment.

EXISTING NOISE ENVIRONMENT

General Land Use Noise

Existing land uses within the Planning Area include single- and multi-family residential development, commercial, industrial, open space, and public facility land uses. Noise sources associated with existing land uses include residential maintenance, parking lot noise, heating, and cooling system (HVAC) noise, property maintenance noise, trash truck noise, loading and unloading noise, and recreational noise.

Noise Measurements

Three long-term 24-hour noise measurements and 10 short-term 15-minute noise measurements were conducted throughout the Planning Area to document the existing noise environment. Figure 5.13-1, *Noise Measurement Locations*, shows the locations of these measurements.

Short-Term Noise Measurements

Ten short-term noise measurements (15-minute) were taken on May 24 and May 26, 2023, in order to document the daytime Leq level at different locations throughout the Planning Area. Measured noise levels ranged between 57.4 and 72.3 dBA Leq. Vehicle noise associated with Hawthorne Boulevard, Marine Avenue, and Rosecrans Avenue was the primary sources of ambient noise. Short-term noise measurement results are presented in Table 5.13-6, *Short-Term Noise Measurement Summary*.

Table 5.13-6
Short-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Start Time	A-Weighted Sound Level (dBA)							
			Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
ST1	4317 Rosecrans Avenue	5:37 PM	72.3	80.4	54.4	77.9	76.3	73.9	70.7	63.4
ST2	4221 Marine Avenue	4:25 PM	69.7	82.7	53.7	74.9	73.1	70.9	68.3	61.8
ST3	15300 Hawthorne Boulevard	4:03 PM	67.6	75.9	55.0	73.6	72.2	70.1	63.9	57.1
ST4	4241 Redondo Beach Boulevard	2:48 PM	64.9	78.5	49.0	71.0	69.0	66.2	62.8	55.0
ST5	16607 Hawthorne Boulevard	12:43 PM	66.4	79.4	51.1	72.2	70.6	67.9	64.4	55.7
ST6	16605 Osage Avenue	3:15 PM	60.4	66.5	57.0	63.5	61.9	60.8	60.1	58.9
ST7	4521 W 147th Street	5:14 PM	57.8	75.7	47.5	66.0	60.7	56.1	52.9	49.3
ST8	4604 Marine Avenue	4:50 PM	66.0	82.7	50.6	71.8	70.1	66.8	62.8	56.3
ST9	16725 Firmona Avenue	1:27 PM	57.4	72.8	42.4	64.3	61.3	57.9	54.0	45.7
ST10	4130 154th Street	3:42 PM	59.9	78.2	47.2	68.8	63.0	57.5	53.2	48.9

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

Notes: 15-minute duration.

dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period.

Long-Term Noise Measurements

Three long-term noise measurements (24 consecutive hours) were taken in order to document the Community Noise Equivalent Level (CNEL) at different locations throughout the Planning Area. As shown in Table 5.13-7, *Long-Term Noise Measurement Summary*, the measured CNEL was 77.7 dBA CNEL at 55 feet from the centerline of Manhattan Beach Boulevard and 120 feet from the centerline of I-405, 74.8 dBA CNEL at 20 feet from the centerline of Freeman Avenue and 170 feet from the centerline of I-405, and 61.6 dBA CNEL at 50 feet from the railroad and 160 feet from the centerline of Artesia Boulevard. The primary noise source was vehicle traffic. Table 5.13-7 also outlines the daytime (7:00 a.m. to 7:00 p.m.), evening (7:00 p.m. to 10:00 p.m.), and nighttime (10:00 p.m. to 7:00 a.m.) Leq levels at each location. These represent the average level over each time period (day/evening/night).

Table 5.13-7
Long-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Date	Description	A-Weighted Sound Level (dBA)			
				Daytime Leq	Evening Leq	Nighttime Leq	CNEL
LT1	4538 Manhattan Beach Boulevard	05/24/23 - 05/25/23	I-405 & Manhattan Beach Boulevard traffic noise	72.8	72.8	70.4	77.7
LT2	16310 Freeman Avenue	05/24/23 - 05/25/23	I-405 traffic noise	72.4	70.2	66.7	74.8
LT3	4626 W 173rd Street	05/31/23 - 06/01/23	Artesia Boulevard traffic noise	62.9	51.5	50.2	61.6

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

Notes: 24hour duration.

dBA = A-weighted decibels; Leq = equivalent noise level; Lmax = maximum noise level; Lmin = minimum noise level; Ln = noise level exceeded n percent of the measurement period.

Existing Noise Modeling

The primary sources of noise in Lawndale are transportation-related noises. Major roadways create ambient noise levels that affect the overall quality of life in the community. Modeled existing noise levels provided in Table 5.13-8, *Existing Exterior Noise Levels Along Roadways*, and on Figure 5.13-2, *Existing Roadway Noise Level Contours*, confirm that there are currently sensitive land uses in the Planning Area that are exposed to noise levels above 65 dBA CNEL.

It should be noted that the modeled noise contours do not take into account factors such as existing buildings, walls, etc., that may reduce or, in some cases, amplify or reduce noise sources. The model also assumes hard site, when in reality, some of the City has soft site ground such as grass or dirt, which will reduce the noise levels. Measured noise levels provided in Table 5.13-6 and Table 5.13-7 do take into account existing structures as well as other existing noise sources.

Those areas in the City that currently experience sound levels greater than 65 dBA CNEL are typically near major vehicular transportation corridors. Traffic noise levels typically depend on three factors: (1) the volume of traffic, (2) the average speed of traffic, and (3) the vehicle mix (i.e., the percentage of trucks versus automobiles in the traffic flow). Vehicle noise includes noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include the distance from the highway, terrain, heavy vegetation, and natural and structural obstacles. While tire noise from automobiles is generally located at ground level, some truck noise sources may emanate from 12 feet or more above the ground.

Table 5.13-8
Existing Exterior Noise Levels Along Roadways

Roadway	Segment Limits	CNEL, dBA	Distance to Contour (feet)			
		@50 ft[1]	70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.3	107	338	1,068	3,378
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	172	544	1,720	5,439
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.5	178	562	1,777	5,619
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.0	99	313	989	3,127
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	123	390	1,234	3,901
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.3	136	430	1,361	4,303
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	145	460	1,455	4,600
Hawthorne Blvd	162nd St to 166th St	72.6	184	582	1,839	5,816
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	170	538	1,703	5,384
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.3	168	531	1,678	5,308
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	71.8	75	237	749	2,369
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.0	78	248	784	2,480
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.0	100	316	999	3,160
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	70.7	59	187	591	1,867
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	71.9	78	246	778	2,461
I-405	West of Hawthorne Blvd	85.4	3,480	11,003	34,795	110,033
I-405	East of Hawthorne Blvd	85.2	3,315	10,483	33,152	104,835

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

Notes: Exterior noise levels calculated at 5-feet above ground. Noise levels calculated from centerline of subject roadway. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.

1. Hawthorne Boulevard & I-405 were calculated at 100 ft away.

Airport and Aircraft Noise

There are no airports located within the Planning Area, and the Planning Area is not located within any airport noise contours. The closest airport to the Planning Area is the Hawthorne Municipal Airport, also known as Jack Northrop Field, located approximately 1.4 miles northeast of the Planning Area. The Los Angeles International Airport is 2.5 miles from the Planning Area. The noise contours associated with these airports do not encroach into the Planning Area.

Vibration Sources

The main sources of vibration in the Planning Area are related to vehicles, construction, and railway. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. Although not specifically within Lawndale, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration

high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface.

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary source of vibration during construction is usually from a bulldozer. A large bulldozer has a peak particle velocity of 0.089 inches per second (87 VdB) at 25 feet.

One freight rail line runs through the City of Lawndale. According to the Federal Railroad Administration Crossing Inventory Forms, there are two daytime and two nighttime freight trains that pass through the City each day at a maximum of 20 miles per hour (mph). Existing buildings are about 50 feet from the centerline of the railway. Therefore, the expected maximum vibration at these buildings is 76 VdB (0.025 inches per second).

5.13.3 REGULATORY SETTING

FEDERAL

Noise Control Act of 1972

The Federal Office of Noise Abatement and Control originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other Federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows:

- The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies.
- The Federal Aviation Agency (FAA) is responsible to regulate noise from aircraft and airports.
- The Federal Highway Administration (FHWA) is responsible to regulate noise from the interstate highway system.
- The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The Federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being constructed adjacent to a highway or that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the Federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement Codes and land use planning.

The intent of a General Plan Noise Element is to set goals to limit and reduce the effects of noise intrusion and to set acceptable noise levels for varying types of land uses. To this end, the City has the authority to set land use noise standards and place restrictions on private activities that generate excessive or intrusive noise. However, it should be recognized that the City does not have the authority to regulate all sources of noise within the City and various other agencies may supersede City authority.

Federal Highway Administration

Federal Highway Administration State routes and freeways that run through the City are subject to Federal funding and, as such, are under the purview of the Federal Highway Administration (FHWA). The FHWA has developed noise standards that are typically used for Federally funded roadway projects or projects that require either Federal or Caltrans review. These noise standards are based on Leq and L10 values and are included in Table 5.13-9, *FHWA Design Noise Levels*.

Table 5.13-9
FHWA Design Noise Levels

Activity Category	Description of Category	Design Noise Levels	
		Leq (dBA)	L10 (dBA)
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Examples include natural parks or wildlife habitats.	57 (exterior)	60 (exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (exterior)	70 (exterior)
C	Developed lands, properties, or activities not included in Categories A or B, above.	72 (exterior)	75 (exterior)
D	Undeveloped lands.	--	--
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (interior)	55 (interior)

Source: FHWA Noise Standard (23 Code of Federal Regulations 772).
Notes: Either Leq or L10 (but not both) design noise levels may be used on a project.

U.S. Department of Housing and Urban Development

The Department of Housing and Urban Development (HUD) issues formal requirements related specifically to standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established three zones. These include:

- 65 dBA Ldn or less - an acceptable zone where all projects could be approved,
- Exceeding 65 dBA Ldn but not exceeding 75 dBA Ldn - a normally unacceptable zone where mitigation measures would be required, and each project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA Ldn area and 10 dBA of attenuation in a 70 to 75 dBA Ldn area, and
- Exceeding 75 dBA Ldn - an unacceptable zone in which projects would not, as a rule, be approved.

The Federal Interagency Committee on Noise

The Federal Interagency Committee on Noise (FICON) developed guidance for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies of the percentage of persons highly annoyed by aircraft noise. These recommendations are often used for different types of environmental noise such as traffic noise. A readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. In areas where the existing noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase is considered significant. When the existing noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact, since it likely contributes to an existing noise exposure exceedance.

STATE

California Department of Health Services

The California Department of Health Services (DHS) Office of Noise Control studied the correlation of noise levels and their effects on various land uses. As a result, the DHS established four categories for judging the severity of noise intrusion on specified land uses. These categories are presented in the State Land Use Compatibility for Community Noise Exposure table. As part of the General Plan Update the City has adopted a slightly modified version of this table to use as a planning tool. This table is discussed further and presented below.

Title 24 of the California Building Code

Section 1206.4 of the 2022 California Building Code (Cal. Code Regs., Title 24, Part 2), Chapter 12 (Interior Environment), establishes an interior noise criterion of 45 dBA CNEL in any habitable room. Per California Building Code, Chapter 2 (Definitions), a habitable space is A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces. This section applies to dwelling and sleeping units.

California Green Building Standards Code (2022), Chapter 5 (Non-residential Mandatory Measures) Section 5.507.4 (Acoustical Control), applies to all proposed buildings that people may occupy but are not residential dwelling units, with the exception of factories, stadiums, storage, enclosed parking structures, and utility buildings.

Buildings must comply with Section 5.507.4.1 or Section 5.507.4.2. Section 5.507.4.1 requires wall and roof-ceiling assemblies exposed to the noise source making up the building, or addition envelope or altered envelope, shall meet a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor to Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when within the 65 CNEL noise contour of an airport, freeway, expressway, railroad, industrial source, or fixed-guideway source. If contours are not available, buildings exposed to 65 dB Leq(h) must meet a composite STC rating of at least 45 or OITC of 35 with exterior windows of at least STC 40 or OITC 30. Section 5.507.4.2 requires that the interior noise attributable to exterior sources must not exceed 50 dBA Leq(h) during any hour of operation. Section 5.507.4.3 requires that assemblies separating tenant spaces from tenant spaces or public places must have an STC of at least 40.

LOCAL

City of Lawndale General Plan

The existing City of Lawndale General Plan (1992 General Plan) Noise Element includes goals, policies, and implementation programs that are intended to avoid or reduce noise impacts related to transportation, stationary, and construction related noise sources. Within the 1992 General Plan Noise Element, Exhibit F, *Noise and Land Use Compatibility*, presents a land use compatibility chart for community noise originally prepared by the California Office of Noise Control (1987). Exhibit F identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" exterior noise levels for various land uses. A "conditionally acceptable" designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements. This land use compatibility chart is based on the 24-hour descriptor CNEL.

City of Lawndale Municipal Code

The City's Noise Ordinance is designed to protect people from non-transportation noise sources such as construction activity; commercial, industrial, and agricultural operations; machinery and pumps; and air conditioners. Enforcement of the ordinance ensures that adjacent properties are not exposed to excessive noise from stationary sources. Enforcing the ordinance includes requiring proposed development projects to show compliance with the ordinance, including operating in accordance with noise levels and hours of operations limits placed on the project site. The City also requires construction activity to comply with established work schedule limits. The ordinance is reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

The City of Lawndale's Noise Ordinance consists of Chapter 8.20, *Noise Control*, of the Lawndale Municipal Code. The City's Zoning Code (Title 17) also contains specific noise limits relating to specific uses.

Section 8.20.010, *Sound-Amplifying Equipment Defined*, defines sound-amplifying equipment as any machine or device for the amplification of the human voice, music, or any other sound, including automobile radios and warning devices.

Sections 8.20.020, *Noncommercial Sound Trucks*, 8.20.030, *Commercial Sound Trucks or Advertising Vehicles*, and 8.20.050, *Sound-Producing Vehicles at Night*, outline noise restrictions with regards to non-commercial sound trucks, commercial sound trucks or advertising vehicles, and sound-producing vehicles at night.

Section 8.20.060, *Unnecessary, Annoying sounds Prohibited*, states that "[n]o person shall make, cause or suffer, or permit to be made upon any premises owned, occupied or controlled by that person any noises or sounds which are unreasonably loud or physically annoying to persons of ordinary sensitivity, or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to other persons." This section also states that the previous statement does not apply to noise or sounds generated in connection with any of the following:

1. Emergency vehicle response sounds and/or sounds from necessary equipment utilized by members of law enforcement, the fire department, paramedics or other emergency responders for the purpose of responding to an emergency or necessary to restore, preserve, protect or save lives or property from imminent danger of loss or harm.
2. Safety and warning devices, including but not limited to, train horns and railroad crossing warning systems, which are consistent with applicable state and Federal laws.
3. The installation, maintenance, repair or replacement of public utilities or public infrastructure conducted by the city, other public entity or a public or private utility company, or their agents, contractors and employees, while undertaking a public works project, subject to the restrictions contained in Section 8.20.070 for allowable construction times.
4. School-related activities and/or programs, including, but not limited to, athletic and entertainment events and activities, provided said activities are conducted on the grounds of a public or private school or college or on other public property.
5. Noise from special community events provided said events are conducted by the city or pursuant to a permit or license issued by the city, including, but not limited to, occasional outdoor events/activities, outdoor gatherings, public dances, shows and sporting and entertainment events.
6. Any activity to the extent regulation thereof has been preempted by state or Federal law.

Section 8.20.070, *Construction*, subsection (A) outlines the allowable hours for construction as follows:

> Construction activity may be conducted between the hours of seven a.m. and seven p.m., Monday through Friday (except national holidays), and eight a.m. and five p.m. Saturdays. Construction activity is prohibited at all other hours and on Sundays and national holidays. For purposes of this section, "construction" or "construction activity" shall include site preparation, demolition, grading, excavation, and the erection, improvement, remodeling or repair of structures, including operation of equipment or machinery and the delivery of materials associated with those activities.

Section 8.20.070, *Construction*, also lists scenarios where the provisions of subsection A do not apply.

Section 17.48.273, *Construction Standards Regulating Apartment Houses*, subsection (A) specifies that the interior of apartments in the R-4 zone must not exceed 45 dBA CNEL. Subsection (B) states that mechanical equipment in this zone will be screened from view and not exceed a maximum of 50 dBA.

Section 17.44.020, *Encroachment Prohibited—Exceptions*, subsection (K) regulates pool equipment to 40 dBA CNEL as measured from the property line. Subsection (L) regulations air conditioning equipment to 40 dBA CNEL as measured from the property line as well.

Section 17.96.040, *Criteria and Standards*, subsection (A)(12) states that small collection facilities shall not exceed noise levels of 55 dBA as measured at a residential property or 60 dBA as measured at other adjacent properties.

Section 17.80.070, *Criteria and Standards*, subsection (A)(16) states that the interior noise levels of condominiums will not exceed 40 dBA CNEL and sound insulation requirements.

Section 17.94.040, *Findings/Requirements*, subsection (A)(19) limits the noise levels of adult-oriented businesses to 55 dBA as measured on the property line.

5.13.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to noise and groundborne vibrations. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (refer to Impact Statement NOI-1);
- Generation of excessive groundborne vibration or groundborne noise levels (refer to Impact Statement NOI-2); and/or
- For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise (refer to Impact Statement NOI-3).

5.13.5 IMPACTS AND MITIGATION MEASURES

Transportation Noise Standards

The significance criteria for Transportation Noise Standards are based on published guidance from FICON, which have been incorporated into the proposed General Plan Update under Policy PS-6.4. Transportation noise may result in substantial increases in ambient noise levels if:

- Existing noise levels are within or below the “normally acceptable” noise criteria at the affected land use (see proposed General Plan Update Table PS-1, Land Use Compatibility for Community Noise Exposure) and the project creates a readily perceptible 5 dBA CNEL or greater project-related noise level increase; or
- Existing noise levels fall within the “conditionally acceptable” noise criteria and the project creates a 3 dBA CNEL or greater project-related noise level increase; or
- Existing noise levels exceed the “conditionally acceptable” noise criteria, and the project creates a community noise level impact of greater than 1.5 dBA CNEL.

Stationary Noise Standards

Stationary noise impacts would be considered significant if they exceed the levels outlined in the Lawndale Municipal Code, as outlined in Section 5.13.3.

Construction Noise Standards

Construction noise would be significant if:

- Construction activities occur outside of the permitted construction hours specified in Section 8.20.070(A) of the Lawndale Municipal Code.

- Construction activities are not consistent with proposed General Plan Update Goals, Policies and Actions relative to Noise.

NOI-1: Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

TRANSPORTATION NOISE IMPACTS

Transportation noise includes noise from aircraft, railways, and roadways. The Planning Area is outside of any airport 65 dBA CNEL contours and therefore, there is no aircraft impact.

One freight rail line runs through the City. The General Plan Update would not increase railway operations within the Planning Area; however, existing buildings are about 50 feet from the centerline of the railway and include primarily residential uses. Therefore, there is the potential for sensitive uses to be exposed to railway noise.

The primary noise source in the Planning Area would continue to be vehicle traffic. Table 5.13-10, *2045 No Project Traffic Noise Levels (dBA, CNEL)* and Table 5.13-11, *2045 Plus Project Traffic Noise Levels (dBA, CNEL)* show the future noise levels at a distance of 50 feet from the centerline of studied roadways by the year 2040 for No Project and With Project conditions. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also provided. Future traffic noise level contours are presented in Figure 5.13-3, *2045 No Project Noise Contours (CNEL)* and Figure 5.13-4, *2045 With Project Noise Contours*.

Table 5.13-10
2045 No Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA	Distance to Noise Contour			
		@ 50 ft[1]	70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.2	105	332	1,051	3,325
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	172	545	1,724	5,453
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.4	172	545	1,722	5,446
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.6	115	365	1,155	3,652
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	124	392	1,240	3,921
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.1	128	405	1,282	4,055
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	145	457	1,445	4,571
Hawthorne Blvd	162nd St to 166th St	72.6	180	571	1,804	5,706
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	168	531	1,679	5,309
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.7	187	590	1,866	5,900
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	72.5	88	279	883	2,794
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.8	94	298	943	2,981
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.5	112	355	1121	3,545
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	71.1	65	205	647	2,046
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	72.7	94	298	941	2,977
I-405	West of Hawthorne Blvd	85.4	3,466	10,960	34,658	109,600
I-405	East of Hawthorne Blvd	85.2	3,301	10,440	33,015	104,401

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

Notes: Exterior noise levels calculated at 5-feet above ground. Noise levels calculated from centerline of subject roadway. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.

1. Hawthorne Boulevard & I-405 were calculated at 100 ft away.

Table 5.13-11
2045 Plus Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA	Distance to Noise Contour			
		@ 50 ft[1]	70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.3	107	338	1,069	3,380
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	173	546	1,728	5,465
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.4	173	491	1,553	4,911
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.7	116	366	1,159	3,665
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	124	392	1,240	3,921
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.2	133	421	1,330	4,207
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.7	149	472	1,494	4,723
Hawthorne Blvd	162nd St to 166th St	72.7	188	593	1,875	5,930
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	168	532	1,683	5,323
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.7	186	588	1,861	5,884
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	72.5	88	279	883	2,794
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.8	95	302	955	3,019
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.6	114	362	1145	3,620
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	71.2	66	208	658	2,080
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	72.8	95	300	950	3,004
I-405	West of Hawthorne Blvd	85.7	3,712	11,740	37,124	117,397
I-405	East of Hawthorne Blvd	85.5	3,197	10,111	31,973	101,107

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

Notes: Exterior noise levels calculated at 5-feet above ground. Noise levels calculated from centerline of subject roadway. Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.

1. Hawthorne Boulevard & I-405 were calculated at 100 ft away.

As shown in Table 5.13-10 and Table 5.13-11 and Figure 5.13-2, Figure 5.13-3 and Figure 5.13-4, by the year 2045, existing land uses adjacent to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level.

Compared to existing traffic noise levels, 2045 without Project traffic volumes are expected to be up to 0.8 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible

increases in ambient noise along the analyzed roadways; refer to Table 5.13-12, *Change in Noise Along Roadways (dBA, CNEL @ 50')*.

Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore result in a less than significant impact to roadway noise levels.

Table 5.13-12
Change in Noise Along Roadways (dBA, CNEL @ 50')

Roadway	Segment	Existing	2045 No Project		2045 With Project	
		CNEL @ 50' dBA[1]	CNEL @ 50' dBA	Change in Noise Level	CNEL @ 50' dBA	Change in Noise Level
Inglewood Ave	Marine Ave to 153rd Pl	73.3	73.2	-0.1	73.3	0.0
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	75.4	0.0	75.4	0.0
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.5	75.4	-0.1	75.4	-0.1
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.0	73.6	0.6	73.7	0.7
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	73.9	0.0	73.9	0.0
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.3	71.1	-0.2	71.2	-0.1
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	71.6	0.0	71.7	0.1
Hawthorne Blvd	162nd St to 166th St	72.6	72.6	0.0	72.7	0.1
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	72.3	0.0	72.3	0.0
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.3	75.7	0.4	75.7	0.4
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	71.8	72.5	0.7	72.5	0.7
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.0	72.8	0.8	72.8	0.8
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.0	73.5	0.5	73.6	0.6
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	70.7	71.1	0.4	71.2	0.5
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	71.9	72.7	0.8	72.8	0.9
I-405	West of Hawthorne Blvd	85.4	85.4	0.0	85.7	0.3
I-405	East of Hawthorne Blvd	85.2	85.2	0.0	85.5	0.3

Source: MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023; Kittelson & Associates, Inc., 2023.

Notes: An impact would occur if the Project increased the roadway segment level by 3 dB or more (an audible difference) and resulting in a future level above 65 dBA CNEL.
1. Hawthorne Boulevard & I-405 were calculated at 100 ft away.

Where future development projects under the General Plan Update may be exposed to noise levels that exceed the land use compatibility criteria, such as residential developments within the Hawthorne Boulevard Specific Plan area or sensitive land uses developed adjacent to the existing rail line, impacts could be mitigated to a level that is less than significant with the implementation of noise control measures, such as relocating residential outdoor recreational areas away from 60 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Additionally, the General Plan Update Public Safety Element includes policies and actions intended to minimize exposure to excessive noise, including noise associated with traffic. Specifically, proposed Policies PS-6.1 through PS-6.4 and proposed Action PS-6c would reduce potential noise impacts associated with transportation. Policy PS-6.1 requires adherence to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community. Policy PS-6.2 requires consistency with the land use compatibility standards contained in proposed Table PS-1 and the Lawndale Municipal Code. Policy PS-6.3 requires the use of best practices in new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code. Policy PS-6.4 requires acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses, and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in the proposed Public Safety Element. Action PS-6c requires new development and transportation projects be reviewed for compliance with the noise requirements established in the proposed General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code, and, where necessary, mitigate excessive noise through best practices. Following conformance with the existing regulatory framework, including the General Plan and Lawndale Municipal Code, impacts would be less than significant in this regard.

STATIONARY NOISE SOURCES

Implementation of the General Plan Update could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. While the General Plan Update does not explicitly propose any new noise-generating uses, the proposed Land Use Map would allow for the development of mixed-uses, increased residential development at higher densities, and new commercial development, which may result in new noise sources along major corridors, including Hawthorne Boulevard. Specific development projects and the details of future noise-generating land uses that may be located in the Planning Area are not known at this time. Additionally, noise from existing stationary sources, as identified above, would continue to impact noise-sensitive land uses in the vicinity of the noise sources.

While no specific development projects are proposed under the General Plan Update, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses. Where this occurs, detailed noise studies would be required to ensure that noise control measures are implemented into the project design. Such measures could include the redesign of stationary noise sources away from sensitive uses, construction of sound walls or berms between noise generating uses and sensitive uses, using buildings to create additional buffer distance and screening, or other site design measures to ensure that non-transportation (stationary) noise sources do not cause exterior and interior noise levels to exceed allowable standards at sensitive receptors.

The General Plan Update Public Safety Element includes policies and actions that are intended to reduce noise associated with stationary sources. Specifically, proposed Policies PS-6.3, PS-6.4, PS-6.8, and proposed Actions PS-6c, PS-6d, and PS-6e would reduce noise associated with stationary sources. Policy PS-6.3 requires the use of best practices in new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code. Policy PS-6.4 requires acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses, and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in the proposed Public Safety Element. Policy PS-6.8 requires the use of noise attenuation measures for all new commercial development expected to produce excessive noise. In existing cases where the City's noise standards are exceeded, Policy PS-6.8 directs Code Enforcement to require compliance. Action PS-6c requires new development and transportation projects be reviewed for compliance with the noise requirements established in the proposed General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code, and, where necessary, mitigate excessive noise through best practices. Action PS-6d requires acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in the proposed General Plan. The studies must include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with the proposed Public Safety Element. Action PS-6e requires review of locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process, and limits delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Exceptions may only be approved if full compliance with the nighttime limits of the noise regulations is achieved. Implementation of the proposed policies and actions of the General Plan Update would reduce noise impacts from stationary noise sources to a less than significant level.

CONSTRUCTION NOISE

The degree of construction noise may vary for different projects associated with implementation of the General Plan, depending on the construction activities. Noise levels associated with construction also vary with the different phases of construction. In accordance with Section 8.20.070(A) of the Lawndale Municipal Code, construction is prohibited between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or any time on Sunday or a Federal holiday. Construction noise is exempt from the noise ordinance outside of those times.

The Environmental Protection Agency (EPA) has compiled data regarding the noise-generated characteristics of typical construction activities. The data is presented in Table 5.13-13, *Typical Construction Noise Levels*. These noise levels would diminish rapidly with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 86 dBA measured 50 feet from the noise source would reduce to 80 dBA at 100 feet. At 200 feet from the noise source, the noise level would reduce to 74 dBA. At 400 feet, the noise source would reduce by another 6 dBA to 68 dBA.

Table 5.13-13
Typical Construction Noise Levels

Equipment Powered by Internal Combustion Engines	
Type	**Noise Levels (dBA) at 50 Feet**
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Saws	71 - 82
Vibrators	68 - 82
Source: U.S. Environmental Protection Agency, *Reference Noise Levels*.	

Individual projects associated with implementation of the General Plan Update would result in short-term noise impacts associated with construction activities. Two types of short-term noise impacts could occur during construction activities, on-site and off-site.

Construction crew commute and the transport of construction equipment and materials to the site for future development projects would incrementally increase noise levels on access roads leading to the site. Truck traffic associated with project construction would be limited to within the permitted construction hours, as listed in the City's Municipal Code Section 8.20.070(A). Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA Lmax at 50 feet from passing trucks, causing possible short-term intermittent annoyances, the effect on ambient noise levels would be less than 1 dBA when averaged over one hour or 24 hours. In other words, the changes in noise levels over one hour or 24 hours attributable to passing trucks would not be perceptible to the normal human ear. Therefore, short-term construction-related impacts associated with worker commute and equipment transport on local streets leading to the project site would result in a less than significant impact on noise-sensitive receptors along the access routes.

The site preparation phase, which includes grading and paving, tends to generate the highest noise levels, since the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes

excavating machinery such as backhoes, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three or four minutes at lower power settings. Site-specific construction activities associated with future development is expected to require the use of scrapers, bulldozers, motor graders, and water and pickup trucks. The maximum noise level generated by each scraper is assumed to be approximately 87 dBA Lmax at 50 feet from the scraper in operation. Each bulldozer would also generate approximately 85 dBA Lmax at 50 feet. The maximum noise level generated by the sound sources with equal strength increases the noise level by 3 dBA. The potential for noise reduction is project and site-specific. Construction noise would be an impact if construction occurred outside of the hours outlined in Section 8.20.070(A) of the Lawndale Municipal Code. Potential impacts would be site-specific, depending on the equipment used and distances to sensitive receptors.

The General Plan Update Public Safety Element includes policies and actions intended to reduce exposure to excessive noise, including construction noise. Policy PS-6.9 requires construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices. Action PS-6f requires all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible. With implementation of the General Plan Update policies and actions, and compliance with Section 8.20.070(A) of the Lawndale Municipal Code, impacts would be less than significant in this regard.

Proposed General Plan Update Goals, Policies, and Actions:

General Plan Public Safety Element Table PS-1, *Land Use Compatibility for Community Noise Exposure*, presents a land use compatibility chart for community noise derived from a similar table originally prepared by the California Office of Noise Control (2017). This table is proposed to be included in the General Plan Update Public Safety Element. The table identifies “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” exterior noise levels for various land uses. A “conditionally acceptable” designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a “normally acceptable” designation indicates that standard construction can occur with no special noise reduction requirements.

PUBLIC SAFETY ELEMENT

Policy PS-6.1: **California Building Code.** Adhere to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community.

Policy PS-6.2: **Noise Exposure.** Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Table PS-

1 and the Lawndale Municipal Code to facilitate acceptable noise exposure levels for existing and future development.

Policy PS-6.3: **Noise Mitigation.** Require new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

Policy PS-6.4: **Acoustical Studies.** Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element. For projects that are required to prepare an acoustical study, the following mobile and stationary noise source criteria shall be used to determine the significance of those impacts.

A. Mobile Noise Sources:

- Where existing traffic noise levels are within or below the "normally acceptable" noise criteria at the affected land use (see Table PS-1), a readily perceptible 5 dBA CNEL or greater increase in roadway noise will be considered significant;
- Where existing traffic noise levels falls within the "conditionally acceptable" noise criteria at the sensitive land use, a +3 dBA CNEL or greater increase in roadway noise levels will be considered significant; and
- Where existing traffic noise levels exceed the "conditionally acceptable" noise criteria at the sensitive land use, a + 1.5 dBA CNEL or greater increase in roadway noise levels will be considered significant

B. Stationary and Non-Transportation Noise Sources

- A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

Policy PS-6.8: **Commercial Noise.** Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

Policy PS-6.9: **Construction Noise.** Require construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices.

Action PS-6c: Review new development and transportation projects for compliance with the noise requirements established in this General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code. Where necessary, require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials such as rubberized asphalt.

Action PS-6d: Require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in this General Plan. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with this element.

Action PS-6e: Review the locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process. Limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved.

Action PS-6f: Require all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

NOI-2: Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis: The main sources of vibration in the Planning Area are related to vehicles, railways and construction. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. Although not specifically within Lawndale, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface.

TRANSPORTATION VIBRATION

One freight rail line runs through the City of Lawndale. Existing buildings are about 50 feet from the centerline of the railway and include primarily residential uses. With regards to vibration impacts on new development near railroads, human disturbance is the primary concern. It is extremely rare for vibration levels from trains passing to result in structural damage to buildings. In addition, buses and other transit

vehicles are not anticipated to generate excessive vibration levels that would disturb sensitive receptors because these vehicles are traveling at lower speeds and do not generate substantial vibrations. The General Plan Update would not increase railway operations within the Planning Area. Additionally, the Project does not include any specific development proposals. The General Plan Update includes proposed Action PS-6h, which would require future residential projects located adjacent to railroad lines to follow Federal Transit Administration vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day). With implementation of proposed Action PS-6h, this impact would be reduced to less than significant.

CONSTRUCTION VIBRATION

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary sources of vibration during construction are usually vibratory rollers and large bulldozers. As shown in Table 5.13-14, *Vibration Source Levels for Construction Equipment*, a vibratory roller has a peak particle velocity (inches/second) of 0.21 and a large bulldozer has a peak particle velocity of 0.089 (inches per second) at 25 feet. The use of pile driving equipment can generate a peak particle velocity of 1.5 (inches per second) depending on the size and model.

Table 5.13-14
Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (VdB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.		

Table 5.13-15, *Guidelines Vibration Damage Potential Threshold Criteria*, provides maximum PPV levels (inches/second) to be used to determine if groundborne vibration may result in damage, depending on the type of structure. When evaluated in light of the estimated groundborne vibration levels presented in Table 5.13-14, it can be determined that construction activities in the Planning Area have the potential to result in significant impacts related to groundborne vibration associated with construction activities. This impact would be reduced to less than significant with the implementation of the General Plan Update Public Safety Element Policy PS-6.14 and Action PS-6k, which require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

Table 5.13-15
Guidelines Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Source
Extremely fragile historic buildings, ruins, ancient monuments	0.1	0.1
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.3
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Policy PS-6.14: **Vibration Studies.** Require vibration impact studies for new discretionary development and transportation improvements whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

Action PS-6h: Require new residential projects located adjacent to railroad lines to follow the FTA vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day).

Action PS-6k: Require vibration impact studies for all new discretionary projects, including those related to development and transportation, whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The

studies shall include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation's Construction Vibration Guidance Manual.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

NOI-3: For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise?

Impact Analysis: Hawthorne Municipal Airport, also known as Jack Northrop Field, is an FAA-designated general aviation reliever airport owned by the City of Hawthorne. The airport is located approximately 1.4-miles northeast of the northeastern-most portion of the Planning Area. The City of Hawthorne General Plan Noise Element provides noise contours (Figures 5A and 5B) for Hawthorne, which include the airport. The noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne. The Planning Area is not located within any adopted airport land use plan and is located outside of any airport 65 dBA CNEL contours. As such, there are no impacts related to private airports, public airports, airstrips, or adopted airport land use plans.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.13.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for noise is typically localized and considers development within the City.

Would the project, combined with other related cumulative projects, generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Impact Analysis:

TRANSPORTATION NOISE IMPACTS

Table 5.13-11 shows the cumulative noise levels associated with traffic on the local roadway network, including projects within the Planning Area. Cumulative conditions include traffic due to 2045 buildout of

the General Plan Update in addition to pass-through traffic from other jurisdictions. Table 5.13-12 shows the estimated noise level increases which may occur under cumulative conditions. As shown in Table 5.13-11 and Table 5.13-12, by the year 2045, existing land uses adjacent to the studied roadways would be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level. As shown in Table 5.13-12, compared to existing traffic noise levels, 2045 without Project traffic volumes are expected to be up to 0.8 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise along the analyzed roadways. Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and would result in inaudible increases in ambient noise. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to traffic noise.

STATIONARY NOISE

While the Project does not explicitly propose any new noise-generating uses, implementation of the Project could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources. Implementation of land use planning and policies and actions can minimize cumulative noise impacts related to stationary sources by avoiding the placement of noise generating equipment near noise-sensitive land uses and where unavoidable, including design measures to the degree practicable to avoid violating the noise criteria presented in Table PS-1 of the General Plan Update and the Lawndale Municipal Code. The General Plan Update includes policies and actions that are intended to reduce noise associated with stationary sources. Applicants of future development projects would be required to demonstrate compliance with the City's Noise Ordinance and the policies and actions in the proposed General Plan Update Public Safety Element, including proposed Policies PS-6.3, PS-6.4, PS-6.8, and proposed Actions PS-6c, PS-6d, and PS-6e. Conformance with the existing regulatory framework would reduce cumulative noise impacts from stationary noise sources to a less than significant level. Therefore, the proposed Project's incremental contribution to cumulative impacts associated with stationary noise would not be cumulatively considerable.

CONSTRUCTION NOISE

Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. Each construction project would have to comply with the local noise ordinance and General Plan Update policies and actions, including Policy PS-6.9,which requires construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices, and Action PS-6f, which requires all construction activity to comply with the limits established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible. Additionally, projects would comply with mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible. Further, it is unlikely that all construction projects would occur simultaneously within the City. Therefore, the

proposed Project's incremental contribution to cumulative impacts associated with construction noise would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, generate excessive groundborne vibration or groundborne noise levels?

Impact Analysis: Short-term construction noise and vibration is a localized activity and would affect only land uses that are immediately adjacent to a specific project site. The General Plan Update includes policies and actions that are intended to reduce groundborne vibration and groundborne noise levels. In order to reduce potentially significant impacts related to groundborne vibration associated with construction activities of future site-specific development, project applicants would be required to comply with proposed General Plan Update Public Safety Element Policy PS-6.14 and Action PS-6k, which require vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The vibration impact studies would be required to include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations. With implementation of the General Plan Update, potential significant impacts associated with the proposed Project related to construction vibration would be reduced to less than significant. Cumulative development projects within the City would also be reviewed to ensure project-specific construction activities would not generate excessive groundborne vibration or noise levels. If it is determined that site-specific development associated with the cumulative projects would result in groundborne vibration or noise impacts, mitigation measures would be required to reduce the impact. As the Project's potential for vibration impacts would be reduced to a less than significant level, the proposed Project's incremental contribution to cumulative impacts associated with construction vibration would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

For a project located within the vicinity of a private airstrip land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project, combined with other related cumulative projects, expose people residing or working in the project area to excessive noise?

Impact Analysis: As discussed above, the noise contours associated with the airport do not extend beyond the municipal boundaries of the City of Hawthorne. The Planning Area is not located within any adopted

airport land use plan and is located outside of any airport 65 dBA CNEL contours. As such, there are no impacts related to private airports, public airports, airstrips, or adopted airport land use plans. Therefore, proposed Project's incremental contribution to cumulative impacts associated with airport noise would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: There are no relevant proposed General Plan Update goals, policies, and actions.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.13.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Noise impacts associated with implementation of the General Plan Update would be less than significant. No significant unavoidable noise impacts would occur as a result of the General Plan Update.

5.13.8 REFERENCES

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.

California Department of Transportation (Caltrans), *California Airport Land Use Planning Handbook*, January 2002.

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020.

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, April 2020.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* May 2006.

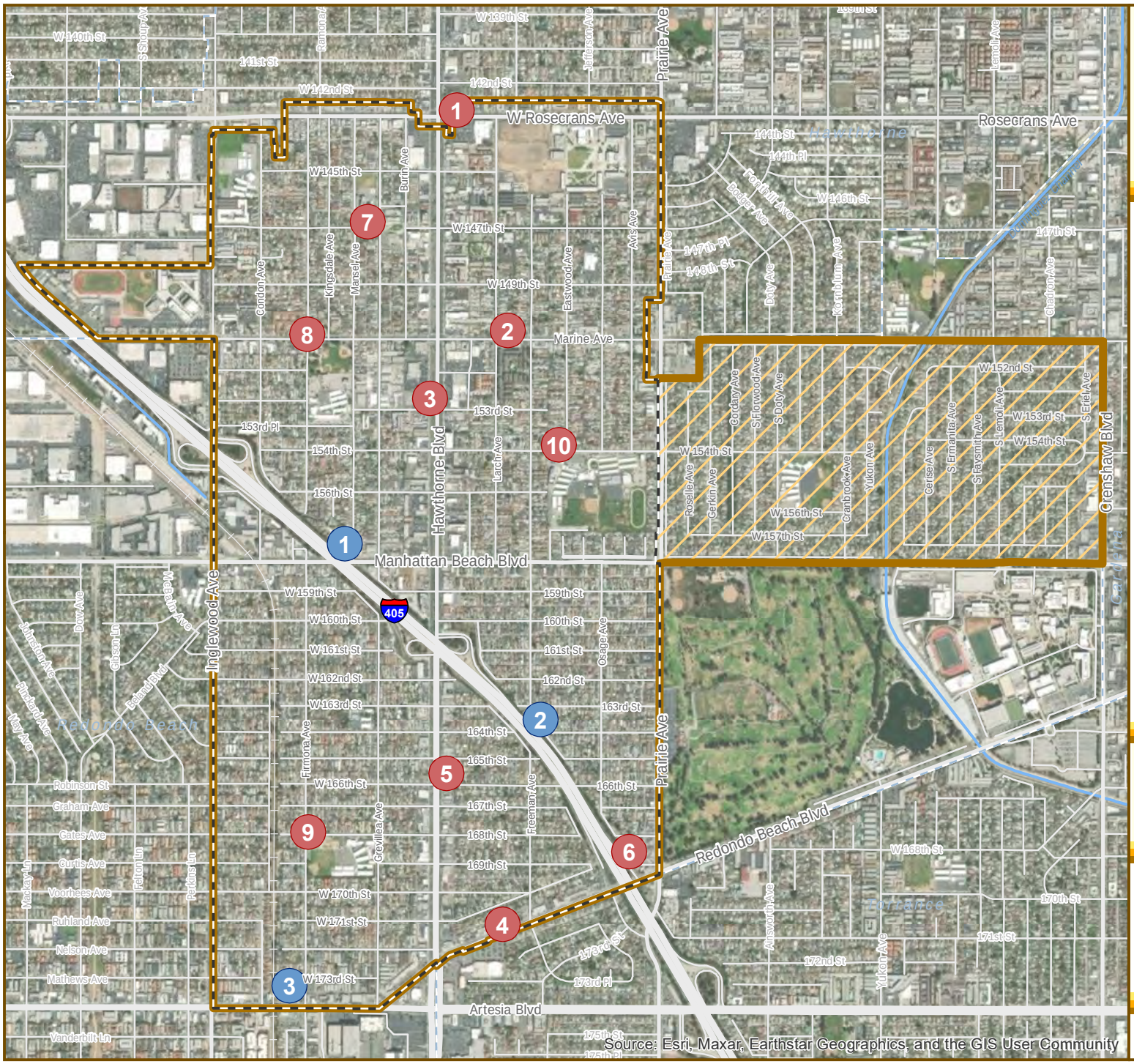
Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual,* September 2018.

MD Acoustics, LLC, *General Plan Update Noise Impact Study – City of Lawndale*, July 12, 2023.

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.13-1. Noise Measurement Locations



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Short-Term Monitoring Location
- Long-Term Monitoring Location

0 500 1,000
Feet

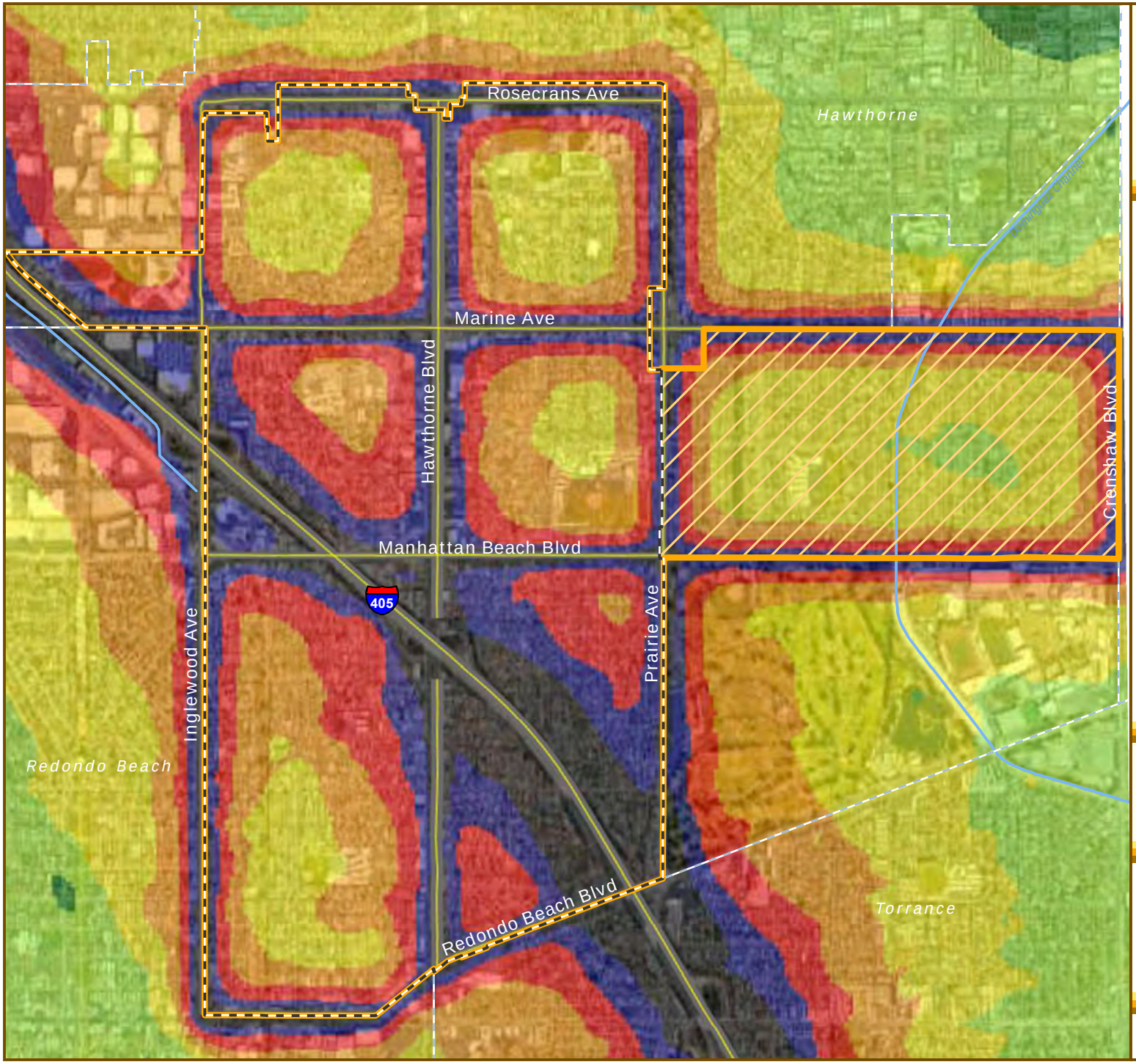
Sources: MD Acoustics, LLC, 6/29/2023; City of Lawndale; Los Angeles County; ArcGIS Online World Imagery Map Service.
Date: July 10, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.13-2. Existing Roadway Noise Level Contours

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Road

Levels in dB(A)

- < 45
- 45 - 50
- 50 - 55
- 55 - 60
- 60 - 65
- 65 - 70
- >= 70

0 500 1,000
Feet

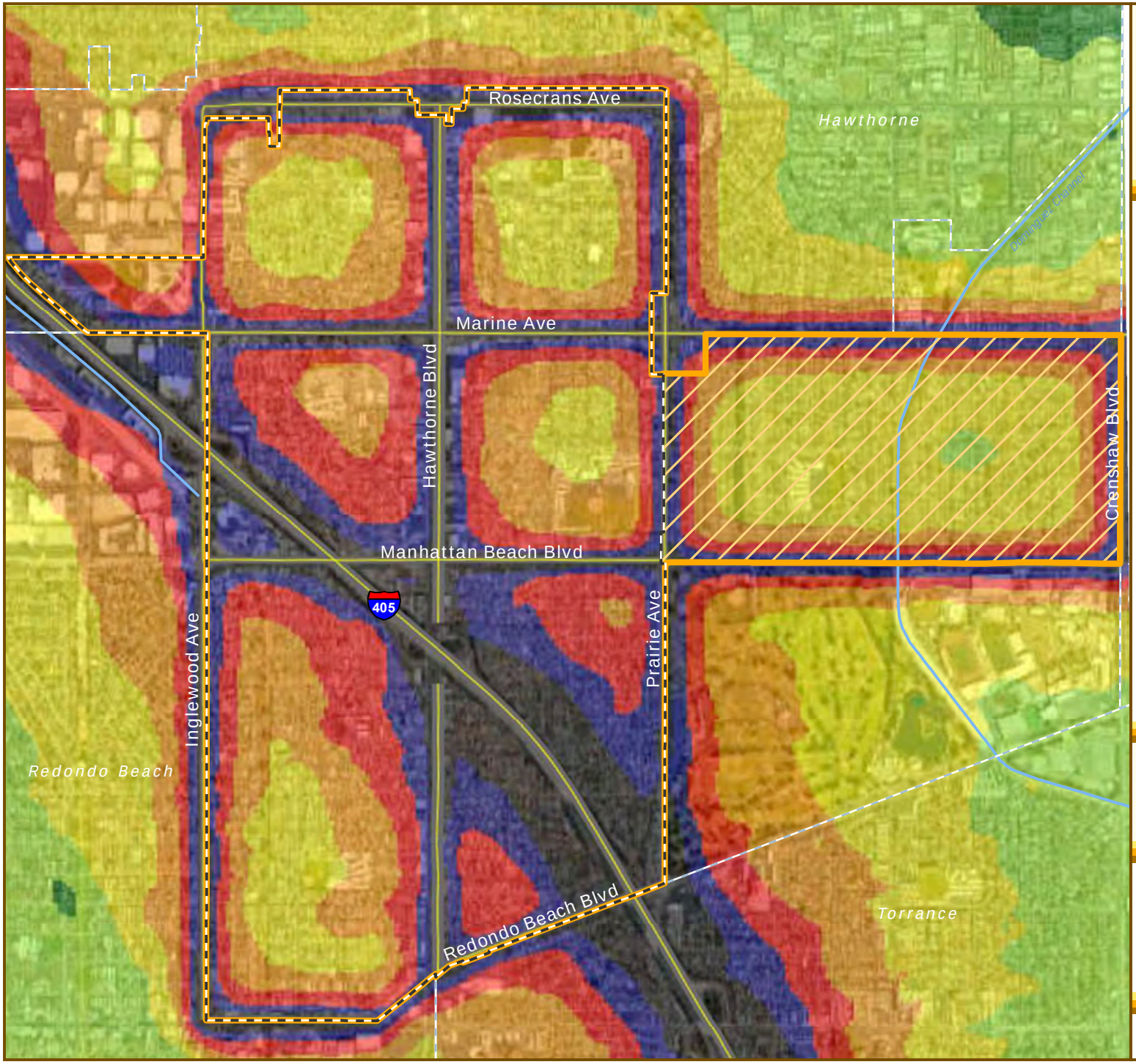
Sources: MD Acoustics, LLC, 6/29/2023; City of Lawndale; Los Angeles County; ArcGIS Online World Imagery Map Service. Date: July 10, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.13-3. 2045 No Project Noise Level Contours

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Road

Levels in dB(A)

- < 45
- 45 - 50
- 50 - 55
- 55 - 60
- 60 - 65
- 65 - 70
- >= 70

0 500 1,000
Feet

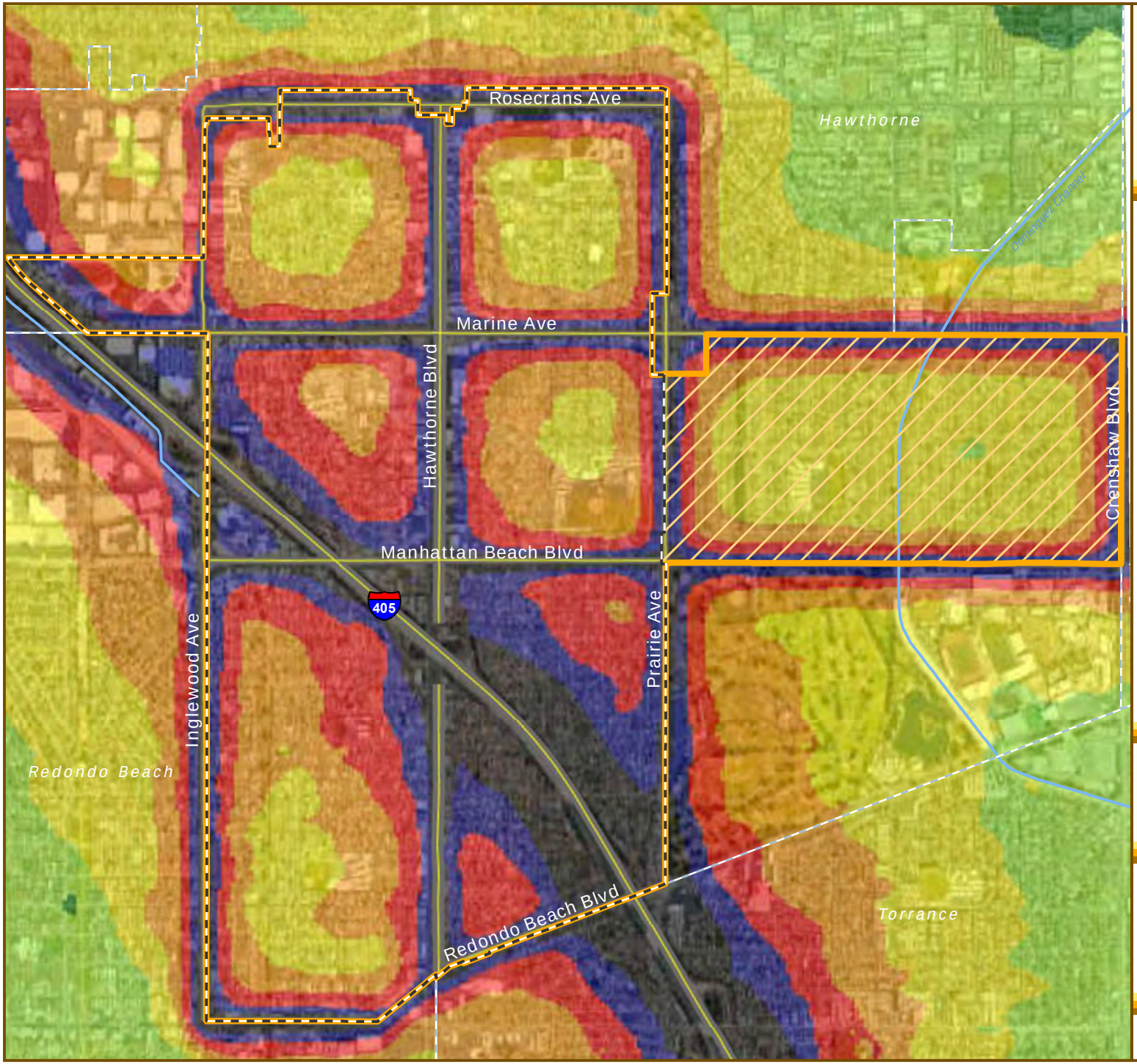
Sources: MD Acoustics, LLC, 6/29/2023; City of Lawndale; Los Angeles County; ArcGIS Online World Imagery Map Service. Date: July 10, 2023.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.13-4. 2045 With Project Noise Level Contours

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Road

Levels in dB(A)

- < 45
- 45 - 50
- 50 - 55
- 55 - 60
- 60 - 65
- 65 - 70
- >= 70

0 500 1,000
Feet

Sources: MD Acoustics, LLC, 6/29/2023; City of Lawndale; Los Angeles County; ArcGIS Online World Imagery Map Service. Date: July 10, 2023.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.14 POPULATION AND HOUSING

5.14.1 PURPOSE

This section identifies the existing population, housing, and employment for the Planning Area and Los Angeles County, as applicable, and provides an analysis of potential population and housing impacts associated with implementation of the General Plan Update.

5.14.2 ENVIRONMENTAL SETTING

POPULATION AND HOUSEHOLD GROWTH

Table 5.14-1, *Population Projections (2022-2045)*, shows the current Los Angeles County and City of Lawndale populations as reported by the Department of Finance (DOF). The DOF population estimates are derived by multiplying the number of occupied housing units by persons per household. The 2022 persons per household estimates are based on 2020 Census benchmark data.

The 2045 population projections are forecasted by the Southern California Association of Governments (SCAG) as part of the Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS) and the companion technical report, the Demographics and Growth Forecast Report. SCAG's 2020-2045 RTP/SCS, referred to as Connect SoCal, provides population, household, and employment data and projections for the counties in the SCAG region, including Los Angeles County. SCAG's forecasts are based in part on jurisdictions' existing land uses and General Plan land use designations. Population projections are calculated based on household growth and household size. Connect SoCal forecasts that the County and City populations would increase by approximately 18 and 10 percent, respectively, between 2022 and 2045.

Table 5.14-1
Population Projections (2022-2045)

Region	Existing Conditions (2022)[1]	Projected Future Conditions (2045)[2]	Percent Change
Los Angeles County	9,861,224	11,674,000	18.38%
Lawndale	31,301	34,400	9.90%

Source:
1. California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State,* January 1, 2022.
2. Southern California Association of Governments (SCAG), *2020-2045 RTP/SCS, Demographics and Growth Forecast,* September 3, 2020b.
Notes: Existing conditions population for Lawndale does not include the Sphere of Influence (SOI) area.

HOUSING UNITS

Similar to the region overall, the housing stock in Lawndale consists primarily of single-family homes. This home type makes up approximately two-thirds (66.2 percent) of all housing units in the City, which is a higher proportion than in all of Los Angeles County (54.5 percent). The City's proportion of units within multifamily buildings—which includes duplexes and four-plexes as well as larger apartment buildings—is approximately 31.4 percent. In comparison, similar unit types make up 43.9 percent of housing in Los Angeles County. The breakdown of housing unit types is shown in Table 5.14-2, *Existing Housing Supply Mix*.

Table 5.14-2
Existing Housing Supply Mix

Category	2022[1]	
	Los Angeles County	Lawndale
Single-family units	1,981,094	6,818
Multi-family units	1,595,006	3,236
Mobile home	59,035	248
Total Housing Units	3,635,136	10,302
Occupied	3,443,284	9,971
Vacancy Rate	5.3%	3.2%
Persons per household	2.80	3.12

Source:
1. California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State,* January 1, 2022.
Notes: Housing supply for Lawndale does not include the SOI area.

The DOF estimates housing units by adding new construction and land annexations; subtracting housing that is removed (e.g., demolition); and, adjusting for units lost or gained by conversions. Annual housing unit change data is supplied to the DOF by local jurisdictions and the U.S. Census Bureau. As indicated in Table 5.14-2, based on DOF estimates, the City's housing stock as of January 2022 was an estimated 10,302 housing units.

Vacancy rates are a measure of general availability of housing. They also indicate how well the types of available units meet the housing market demand. The availability of vacant housing units provides households with choices of type and price to accommodate their specific needs. Low vacancy rates can result in higher prices, limited choices, and settling with inadequate housing. It may also contribute to overcrowding. A vacancy rate between 4.0 and 6.0 is considered "healthy." As indicated in Table 5.14-2, the City's 2022 vacancy rate was 3.2 percent. A low vacancy rate suggests households may have difficulty finding housing within their price range.

SCAG's Connect SoCal (2020-2045 RTP/SCS) projects housing unit stock estimates for 2045. For Lawndale, the number of projected housing units in 2045 is 10,200; for Los Angeles County, the number of projected

housing units is 4,119,000. SCAG forecasts total housing need for each community in southern California based on three general factors:

(1) The number of housing units needed to accommodate future population and employment growth;
(2) The number of additional units needed to allow for housing vacancies; and
(3) The number of very low, low, moderate, and above moderate-income units needed in the community.

Additional factors used to determine the Regional Housing Needs Assessment (RHNA) include tenure, the average rate of units needed to replace housing units demolished, proximity to high quality transit areas, and other factors.

EMPLOYMENT

As shown in Table 5.14-3, *Labor Force Participation and Unemployment*, the County's current employment totals 4,767,204 jobs and is forecast to increase by approximately 12.9 percent to 5,382,000 jobs between 2022 and 2045. Employment numbers are forecasted to increase from approximately 7,407 jobs to 8,300 jobs in 2045 within the City, an increase of approximately 12.1 percent.

Table 5.14-3
Labor Force Participation and Unemployment

Category	Existing Jobs (Employment)	Future Jobs (Employment)[3]	2045 SCAG: Existing Conditions % Difference
Los Angeles County	4,767,204[1]	5,382,000	12.89%
Lawndale	7,407[2]	8,300	12.06%

Source:
1. Southern California Association of Governments (SCAG), *SCAG Local Profiles Report County of Los Angeles*, May 2019.
2. Southern California Association of Governments (SCAG), *SCAG Local Profiles Report City of Lawndale*, May 2019.
3. Southern California Association of Governments (SCAG), *2020-2045 RTP/SCS, Demographics and Growth Forecast*, September 3, 2020.

SCAG states that "a balance between jobs and housing in a metropolitan region can be defined as a provision of an adequate supply of housing to house workers employed in a defined area (i.e., community or subregion). Alternatively, a jobs/housing balance can be defined as an adequate provision of employment in a defined area that generates enough local workers to fill the housing supply." Jobs and housing are considered in balance when a subregion has enough employment opportunities for most people who live there and enough housing opportunities for most of the people who work there. The jobs/housing balance is one indicator of a project's effect on growth and quality of life in a project area. SCAG uses the jobs/housing ratio to assess the relationship between housing and employment growth.

More specifically, Connect SoCal states that "an imbalance between employment and housing in a community is a key contributor to local traffic congestion. These types of origin/destination disparities may also be considered an impediment to environmental justice." According to SCAG, improvements in

the jobs to housing balance may result in a reduction of transportation congestion and related air quality problems. Communities with more than 1.5 jobs per dwelling unit (DU) are considered "jobs rich" and those with fewer than 1.5 jobs per DU are considered "housing rich." As identified in Table 5.14-4, *Jobs to Housing Ratio*, under existing conditions and projected 2045 conditions, both the County and City are considered housing rich. However, under existing conditions and projected 2045 conditions, the City has a much lower ratio of jobs to housing than the County. Both the County and the City would need more job growth to provide greater balance.

Table 5.14-4
Jobs to Housing Ratio

Municipality	Existing Conditions (2022)	Projected Conditions (2045)[3]
Los Angeles County		
Jobs	4,767,204[1]	5,382,000
Housing units	3,635,136[2]	4,119,000
Jobs/house ratio	**1.31**	**1.31**
Lawndale		
Jobs	7,407[4]	8,300
Housing units	10,302[2]	10,200
Jobs/house ratio	**0.72**	**0.81**

Source:
1. Southern California Association of Governments (SCAG), *SCAG Local Profiles Report County of Los Angeles*, May 2019.
2. California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties*, and the State, January 1, 2022.
3. Southern California Association of Governments (SCAG), 2020-2045 RTP/SCS, *Demographics and Growth Forecast*, September 3, 2020.
4. Southern California Association of Governments (SCAG), SCAG Local Profiles Report City of Lawndale, May 2019.

5.14.3 REGULATORY SETTING

STATE

Regional Housing Needs Assessment (RHNA)

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the State-wide housing need. In cooperation with HCD, local governments and Councils of Governments (COGs) are charged with making a determination of the existing and projected housing needs as a share of the State-wide housing need of their city or region.

The Regional Housing Needs Assessment (RHNA) quantifies the housing need by income group within each jurisdiction during specific planning periods. The RHNA is incorporated into local General Plans. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that

enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs. The 6th Cycle Final RHNA Allocation Plan was adopted by the SCAG Regional Council on March 4, 2021 and covers the planning period from October 15, 2021 to October 15, 2029. Table 5.14-5, *Lawndale 6th Cycle Regional Housing Needs Allocation*, shows the City's 6th Cycle RHNA for the 2021-2029 planning period.

Table 5.14-5
Lawndale 6th Cycle Regional Housing Needs Allocation

Income Level	Dwelling Unit Allocation
Very-low income	732
Low income	311
Moderate income	371
Above-moderate income	1,083
Total	**2,497**

Source: Southern California Council of Governments (SCAG), *Pre-Certified Local Housing Data For the City of Lawndale*, April 2021.

LOCAL

Southern California Association of Governments

Regional planning agencies such as SCAG recognize that planning issues extend beyond the boundaries of individual cities. Efforts to address regional planning issues such as affordable housing, transportation, and air pollution have resulted in the adoption of regional plans that affect the Planning Area.

SCAG has evolved as the largest council of governments in the United States, functioning as the Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial) and 191 cities. The region encompasses an area more than 38,000 square miles. As the designated MPO, the Federal government mandates SCAG research and develop plans for transportation, growth management, hazardous waste management, and air quality. As a result, SCAG prepares comprehensive regional plans to address these concerns.

SCAG is responsible for the maintenance of a continuous, comprehensive and coordinated planning process resulting in a Regional Transportation Plan (RTP) and a Regional Transportation Improvement Program. SCAG is responsible for development of demographic projections and is also responsible for development of the integrated land use, housing, employment, transportation programs, measures, and strategies for the Air Quality Management Plan.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The passage of California Senate Bill (SB) 375 in 2008 requires that an MPO, such as SCAG, prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas emissions from automobiles and light duty trucks (Government Code Section 65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation

planning and maximize transportation investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

On September 3, 2020, SCAG's Regional Council approved and fully adopted Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy). Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

The 2020 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita vehicle miles traveled (VMT). Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (i.e., VOCs), CO, NOx, and $PM_{2.5}$.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for Federal and State funding, and to expand the potential for all people to use active transportation.

Growth Forecasts

SCAG's Forecasting Section is responsible for producing socio-economic estimates and projections at multiple geographic levels and in multiple years. The Forecasting Section develops, refines, and maintains SCAG's regional and small area socio-economic forecasting/allocation models. Adopted 2020 RTP/SCS

Growth Forecasts provide population, household, and employment data for 2045. The socio-economic estimates and projections are used by Federal and State mandated long-range planning efforts such as the RTP, Air Quality Management Plan, Regional Transportation Improvement Program, and the Regional Housing Needs Assessment. SCAG's Adopted 2020 RTP/SCS Growth Forecasts are used to assess a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint; refer to Section 6.3, *Growth-Inducing Impacts*.

City of Lawndale 2021-2029 Housing Element

The Housing Element is one of the seven General Plan Elements that are mandated by the State of California (California Government Code Sections 65580 to 65589.8). California State law requires that the Housing Element consists of, "an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing" (Government Code Section 65580).

The Housing Element is a guide for housing within Lawndale and provides an indication of the need for housing in the community in terms of affordability, availability, adequacy, and accessibility. The Housing Element provides a strategy to address housing needs and identifies a series of specific housing programs to meet community needs.

The City's 6th Cycle Housing Element was adopted on September 19, 2022 and specifically addresses housing needs for Lawndale from October 15, 2021 through October 15, 2029, in line with the RHNA planning period adopted by SCAG. Lawndale's share of the regional housing need for the 2021-2029 RHNA period was allocated by SCAG based on factors such as existing need, recent growth trends, income distribution, and capacity for future growth. The Housing Element identifies adequate land with appropriate zoning and development standards to accommodate its allocation of the regional housing need. Table 5.14-5, shows the City's 6th Cycle RHNA for the 2021-2029 planning period.

The City introduced two new mechanisms to allow for residential development to be created to implement the Housing Element on sites considered viable for housing development. The first is "Housing Overlay 100", which will be applied to 16 nonresidential sites outside of the Hawthorne Boulevard Specific Plan area and allow for residential densities of up to 100 dwelling units per acre. The second is "Housing Overlay 150" which will be applied to 68 nonresidential sites inside the Hawthorne Boulevard Specific Plan area, will allow for residential densities up to 150 dwelling units per acre.

City of Lawndale Municipal Code

Title 17 of the Lawndale Municipal Code contains the City's Zoning Ordinance (Zoning Code). The Zoning Code carries out the policies of the General Plan by classifying and regulating the uses of land and structures within the City, consistent with the General Plan. Zoning provides a legal mechanism for local government regulation of the land uses described in the General Plan Land Use Map. In addition to providing specific regulations related to minimum lot size, building heights, setbacks, lot coverage, etc., for each zoning district, the Zoning Code also lists the uses that would be acceptable or could be considered in each district, as well as those that would be considered unacceptable. For some uses, further regulations are established. Zoning regulations designate the permitting process that applies for approval of land uses in the zoning district.

Chapter 12.34, *Park Development Fees*, provides for the payment of park facilities impact fees applicable to dwelling units constructed, enlarged, or remodeled in the City.

The City of Lawndale Municipal Code Chapter 3.14, *Utility Users Tax*, imposes a tax for users of various utilities within the City in order to fund municipal utility services. Section 3.14.090*, Water Users Tax,* imposes a tax on every person in the City using water which is delivered through mains or pipes.

5.14.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to population and housing. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (refer to Impact Statement POP-1); and
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (refer to Impact Statement POP-2).

5.14.5 IMPACTS AND MITIGATION MEASURES

POP-1: Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure?

Impact Analysis: The City and surrounding area, are highly urbanized and considered to be built-out. At buildout, the General Plan Update would accommodate approximately 3,942 new housing units and 808,864 square feet of new non-residential building square footage within the Planning Area compared to existing conditions, as shown in Table 3-4 in Section 3.0, *Project Description*. This new growth may increase the City's population by approximately 9,482 residents and 2,738 jobs compared to the existing condition. The land uses allowed under the proposed General Plan (Figure 3-4 in Section 3.0) provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard Specific Plan area. Overall, the proposed Project would provide new development opportunities to support the vision for development consistent with the General Plan Update and the State's Housing Element Law, including accommodating the City's RHNA. This is primarily accommodated through the implementation of the "Housing Opportunity Overlay" on sites currently identified for non-residential development and through the Hawthorne Boulevard Specific Plan.

Given the historical and current population, housing, and employment trends, growth in the City, as well as the entire State, is inevitable. The primary factors that account for population growth are natural increase and net migration. Other factors that affect growth include the cost of housing, the location of jobs, the economy, the climate, and transportation. Residential growth within the City would continue to occur based primarily on the demand of the housing market. Existing development within the City is served by existing roads, transit, infrastructure, and public services. Further, the area surrounding the

Planning Area is developed. There is the potential for infrastructure improvements within the Planning Area associated with site-specific development and overall development growth; however, General Plan implementation would not require the extension of roads or other infrastructure into an area that is not already served.

Potential growth inducing impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. As discussed above, SCAG is the responsible agency for developing and adopted regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045.

Table 5.14-6, *General Plan Update Compared to SCAG*, compares the General Plan Update growth projections with SCAG's 2045 households, dwelling units, population and employment growth forecasts for the City.

Table 5.14-6
General Plan Update Compared to SCAG

Forecast Category	2045 General Plan Update	SCAG 2045 Growth Forecast	GPU Difference	Percent Change
Population	47,948	34,400	+13,548	39.4%
Households	14,882[1]	10,200	+4,682	45.9%
Dwelling Units	15,405	11,128[1]	+4,277	38.4%
Employment	9,208	8,300	+908	10.9%

Notes:
1. Based on 3.4% vacancy rate (California Department of Finance 2023).

As indicated in Table 5.14-6, SCAG projects that the City's population will reach 34,400 persons by 2045. The General Plan Update is projected to result in a population of approximately 47,948 persons (2045). The City's projected population would be approximately 39.4 percent greater than SCAG's forecast. Similarly, the City's projected housing stock and employment would be approximately 38.4 percent and 10.9 percent greater than SCAG forecasts, respectively. As discussed above, the SCAG projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Lawndale could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The proposed Project is intended to implement the City's 2021-2029 Housing Element; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs would be included as part of SCAG's future growth forecasts.

The General Plan Update growth projections would exceed SCAG's 2045 population, housing stock, and employment projections for the City of Lawndale. General Plan Update growth projections form the basis

of SCAG's planning and policy documents, including regional growth forecasts. Thus, the growth anticipated with the General Plan Update would be considered in SCAG's updated growth forecasts for the City.

The proposed General Plan Update includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. Sections 5.1 through 5.20 and 6.0 provide a discussion of environmental effects associated with development allowed under the proposed General Plan Update. Each of these EIR sections include relevant policies and action items that would mitigate potential environmental impacts associated with growth, to the greatest extent feasible. Further, the General Plan Update accounts for the proposed Project's anticipated population growth and establishes goals, policies, and actions to accommodate such growth. The proposed Land Use Element Goal LU-2 seeks to manage and direct growth so that the community and its neighborhoods are protected and enhanced.

With implementation of General Plan Update policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds beyond those disclosed and analyzed throughout this EIR. Therefore, population and housing growth associated with the proposed General Plan Update would result a less than significant impact, as there are no additional potential environmental impacts beyond those analyzed and disclosed in this EIR that would result from growth accommodated by the proposed project. No additional mitigation is required.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Action LU-1e Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Goal LU-2: **Managed Growth.** A City that manages and directs growth to strategic locations so that the community and its neighborhoods are protected and enhanced.

Policy LU-2.2: **Focused Areas for New Development.** Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-3.1: **Surrounding Uses.** Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

POP-2: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: While no specific development projects are proposed as part of the Lawndale General Plan Update, the General Plan Update will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. Overall, the proposed Project would provide new development opportunities to support the vision for development consistent with the General Plan Update and the State's Housing Element Law, including accommodating the City's 2021-2029 RHNA. This is primarily accommodated through the implementation of the "Housing Opportunity Overlay" on sites currently identified for non-residential development and through the Hawthorne Boulevard Specific Plan.

The Project does not propose any site-specific development at this time; therefore, no existing residents would be displaced. Development and redevelopment of the identified parcels would occur gradually over time. The General Plan Update establishes goals, policies, and actions to ensure the compatibility of new and existing development, including housing. The proposed Land Use Element Goal LU-2 seeks to manage and direct growth so that the community and its neighborhoods are protected and enhanced. Goal LU-3 supports new development to be sensitively integrated with existing development. Policy LU-3.1 ensures the City considers the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area. Therefore, impacts of the proposed General Plan Update on the displacement of people or housing are considered less than significant and no mitigation is required. The policies listed below would further ensure that a range of housing types are provided in the City, and that housing conditions are evaluated as the housing supply ages.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health;

sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Goal LU-2: **Managed Growth.** A City that manages and directs growth to strategic locations so that the community and its neighborhoods are protected and enhanced.

Policy LU-2.2: **Focused Areas for New Development.** Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-2.3 **Hawthorne Boulevard Specific Plan.** Facilitate the redevelopment of Hawthorne Boulevard through implementation of the Hawthorne Boulevard Specific Plan which encourages a mixture of quality multi-family housing development, local- and destination-type commercial uses, eateries, and civic uses such as cultural and performing art facilities in innovative development formats.

Action LU-2e Implement the Hawthorne Boulevard Specific Plan to guide future development in this area. This includes reviewing and revising the implementation strategies identified in the Specific Plan as part of the Specific Plan's comprehensive update, and prioritizing the most critical actions for funding and staff resources.

Policy LU-3.1: Surrounding Uses. Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.3 **Code Compliance**. Require land use compatibility through adherence to the policies, standards, and regulations in the Municipal Code, Zoning Code, and other regulations or administrative procedures that manage the form and relationship of projects and uses.

Policy LU-3.4 **Residential Uses**. Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including transportation facilities.

Action LU-3c: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

Action LU-3e Analyze land use compatibility through the development review process to require adequate buffers and/or architectural enhancements that protect sensitive receptors from intrusion of development activities that may cause unwanted nuisances and health risks.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.14.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for population and housing considers the SCAG region and the City.

Would the project, combined with other related cumulative projects, induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes, and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Impact Analysis: As discussed, although implementation of the General Plan Update would provide for increased population growth within the Planning Area when compared to SCAG's growth forecasts, the proposed Project is intended to accommodate the City's fair share of statewide housing needs, which are allocated by SCAG, based on regional numbers provided by HCD on a regular basis (every five to eight years). SCAG's Connect SoCal growth forecasts through 2045 do not currently consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. However, the regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts.

The land uses allowed under the proposed General Plan Update provide opportunities for infill development in the Planning Area, primarily in the Hawthorne Boulevard Specific Plan area, but would not create physical division within existing communities. New development and redevelopment projects would be designed to complement the character of existing neighborhoods and provide connectivity between existing development and new development within the cumulative analysis area. The proposed General Plan Update does not include any new roadways, infrastructure, or other features that would divide existing communities. Moreover, with implementation of General Plan Update policies and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under the proposed General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds, beyond those disclosed and analyzed throughout this EIR. Therefore, the proposed General Plan Update's incremental contribution to cumulative population impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis: As discussed, implementation of the General Plan Update would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Sites designated with the Housing Opportunity Overlay have existing non-residential uses. The Project does not propose any site-specific development at this time; therefore, no existing residents would be displaced. Development and redevelopment of the identified parcels would occur gradually over time. The General Plan Update establishes goals, policies, and actions to ensure the compatibility of new and existing development, including housing. Therefore, the proposed General Plan Update's incremental contribution to cumulative impacts associated with displacement of people or housing would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.14.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Population and housing impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable population and housing impacts would occur as a result of the General Plan Update.

5.14.8 REFERENCES

California Department of Finance (DOF), *Report E-5 Population and Housing Estimates for Cities, and Counties, and the State*, January 1, 2023.

Southern California Association of Governments (SCAG), *2020-2045 RTP/SCS, Demographics and Growth Forecast*, September 3, 2020.

Southern California Association of Governments (SCAG), *SCAG Local Profiles Report County of Los Angeles*, May 2019a.

Southern California Association of Governments (SCAG), *SCAG Local Profiles Report City of Lawndale*, May 2019b.

Southern California Council of Governments (SCAG), *Pre-Certified Local Housing Data For the City of Lawndale*, April 2021.

5.15 PUBLIC SERVICES

This section identifies the existing public services within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

Public Services include fire protection, police protection, schools, public parks, and libraries. Public parks are discussed in Section 5.16, *Parks and Recreation*, of this EIR.

5.15.1 ENVIRONMENTAL SETTING

FIRE PROTECTION AND EMERGENCY SERVICES

Fire Protection Services

The Los Angeles County Fire Department (LACoFD) provides full-service firefighting and emergency medical services to the Planning Area. LACoFD serves over four million residents in 60 cities and the unincorporated areas of the County, along with the City of La Habra located in Orange County (Los Angeles County Fire Department 2022). Fire protection services include fire, emergency medical, urban search and rescue, hazardous materials prevention and response, air operations, and other emergency response resources. In 2021, the LACoFD received a total of 403,924 calls within the LACoFD service area, including: 312,550 calls (77 percent) for emergency medical services (EMS); 11,373 calls (3 percent) for fire; 63,702 (16 percent) miscellaneous calls; 13,478 (3.3 percent) false alarm calls; 2,144 (0.5 percent) mutual aid calls; and 677 (0.2 percent) hazardous materials calls (Los Angeles County Fire Department 2022).

The Kenny Hahn Memorial Lawndale Fire Station No. 21 (Station 21), located at 4312 West 147th Street, serves the Planning Area; refer to Figure 5.15-1, *Public Safety Facilities*. Station 21 is staffed with a three-person engine company (one Captain, one Fire Fighter Specialist, one Fire Fighter) and a two-person paramedic squad (two Fire Fighter/Paramedics) (Los Angeles County Fire Department 2023a).

According to LACoFD, during 2022, the average response time in the City was five minutes, two seconds, which is within the acceptable response time goals of the LACoFD (Los Angeles County Fire Department 2023a).

Los Angeles County Fire Department Programs

The LACoFD provides a number of educational programs to reduce fire risk and prepare residents for emergency response (Los Angeles County Fire Department 2023b).

Ready! Set! Go!

The LACoFD distributes an informational Ready! Set! Go! brochure, which provides residents with critical information on creating defensible space around their home, retrofitting homes with fire-resistant materials, and preparing to safely evacuate well ahead of a wildfire.

F.I.R.E.

The LACoFD provides a Family Instructions for Rapid Escape (F.I.R.E.) guide and coloring book, so families can make their homes F.I.R.E. ready and learn how to safely escape. The F.I.R.E. guide contains instructions and a checklist to prepare one's home for quick escape in the event of a fire.

Community Emergency Response Team (CERT) Training

The LACoFD offers a free Federal Emergency Management Agency (FEMA)-approved 20-hour Community Emergency Response Team (CERT) training program to resident volunteers. CERT training provides residents with the skills and tools necessary to take care of themselves, their families, neighbors, and coworkers in the event of a disaster. In the event of an emergency, some CERT volunteers may become part of the disaster plan for local authorities.

POLICE PROTECTION

The City contracts with the Los Angeles County Sherriff's Department (LASD) for its law enforcement services. Lawndale is served by a local substation (Lawndale Sheriff's Center) located at 15331 Prairie Avenue; refer to Figure 5.15-1. The Lawndale Sheriff's Center provides general law enforcement services specifically to the citizens and visitors of Lawndale. The South Los Angeles Sheriff's Station, located at 1310 West Imperial Highway, Los Angeles, provides additional police protection services to the City and serves unincorporated El Camino Village within the Planning Area.

The Lawndale Sheriff's Center provides the City with general law enforcement services including field patrol deputies, supervision, and traffic services. Specialized services such as Detective Bureau, Narcotics Bureau, Commercial Crimes Bureau, Family Crimes Bureau, Special Weapons Teams, and other such services are provided to the City by the South Los Angeles Station and/or other Los Angeles County Sheriff's Department resources.

The City does not have an adopted target officer-to-population service ratio. However, the City works closely with the Sheriff's Department to determine and meet the community needs for adequate personnel and equipment to effectively combat crime, and meet existing and projected service demands. As of April 2023, the Lawndale Sheriff's Center was staffed with 19 sworn personnel and two professional staff (Los Angeles County Sheriff's Department 2023). As of April 2023, the South Los Angeles Sheriff's Station was staffed with 141 sworn personnel and 38 professional staff. The Sheriff's Department provides 24-hour per day coverage (Los Angeles County Sheriff's Department 2023).

The LASD generally adheres to the following, widely-accepted industry standard among law enforcement agencies for responding to emergent, priority, and routine calls for service: 10 minutes, 20 minutes, and 60 minutes, respectively (Los Angeles County Sheriff's Department 2023). Current average response times for emergency, priority, and routine calls for service received from the proposed Planning Area are five, 20, and 60 minutes, respectively (these are approximate time ranges only and could be affected by traffic conditions; these response times are variable because the responding unit may be elsewhere within the Station's service area and not necessarily dispatched from the Station itself) (Los Angeles County Sheriff's Department 2023).

Crime Statistics

Available crime statistics were obtained for the most recent years available. In 2019, approximately 536 crimes (125 violent crimes and 411 property crimes) were reported in the City (Federal Bureau of Investigation 2023a). As such, the City had approximately 16.4 crimes per 1,000 people over the course of the year. This is lower than the rate for the Los Angeles-Long Beach-Glendale Metropolitan Division, which had approximately 27.9 crimes per 1,000 people in 2019 (Federal Bureau of Investigation 2023b).

SCHOOLS

The Planning Area is primarily served by the Lawndale Elementary School District (LESD) and Centinela Valley Union High School District (CVUHSD). Environmental Charter High School leases a site in the City of Lawndale from LESD and provides a grade 9-12 program with emphasis on experiential, project-based learning. As shown in Table 5.15-1, *Lawndale Schools*, LESD includes six elementary and two middle schools; and CVUHSD includes two comprehensive high schools, two alternative high school, and one adult education school. For the 2021-2022 school year, 9,251 students were enrolled in grades kindergarten through 12 in schools within the Planning Area. LESD and CVUHSD also serve portions of the City of Hawthorne and unincorporated Los Angeles County.

Table 5.15-1
Lawndale Schools

School	Grades	Address	Enrollment (2021-2022)
Lawndale Elementary School District (LESD)			
Jane Addams Middle School	6-8	4535 West 153rd Place	795
F. D. Roosevelt Elementary[1]	K-5	3533 West Marine Ave.	497
William Anderson Elementary	K-7	4130 West 154th Street	596
William Green Elementary	K-5	4520 West 168th Street	586
Billy Mitchell Elementary	K-5	14429 Condon Avenue	417
Will Rogers Middle School	6-8	4110 West 154th Street	852
Lucille Smith Elementary	K-5	4521 West 147th Street	363
Mark Twain Elementary	K-5	3728 West 154th Street	564
Centinela Valley Union High School District (CVUHSD)			
Lawndale High School	9-12	14901 Inglewood Avenue	1,984
Leuzinger High School	9-12	4118 West Rosecrans Avenue	1,836
Lloyd High School (Alternative)	10-12	4951 Marine Avenue	220
Centinela Valley Independent Study School (Alternative)	9-12	4951 Marine Avenue	26
Centinela Valley Adult School	9-12	4951 Marine Avenue	--
Other			
Environmental Charter High School	9-12	16315 Grevillea Avenue	515

Source: California Department of Education, *DataQuest*, https://dq.cde.ca.gov/dataquest/, accessed March 8, 2023.
Notes:
1. F. D. Roosevelt Elementary School is located outside of the Planning Area but is a part of the LESD and serves the Planning Area.

As described in the CVUHSD Level I Developer Fee Study, the CVUHSD has calculated the costs of modernized/expanded school facilities based on anticipated growth generated by new development within the CVUHSD district area, which includes the City of Lawndale (Jack Schreder & Associates 2017). The CVUHSD Fee Study notes that school facility buildings typically have a useful life span of 20 years before modernization is needed; therefore, the CVUHSD Fee Study estimates modernization need over a 20-year period. Based on the adopted Housing Elements for Los Angeles County (Lennox and Alondra Park areas), the City of Hawthorne, and the City of Lawndale, the CVUHSD Fee Study anticipates 4,667 residential units to be constructed within the CVUHSD district area over a 20-year period. The CVUHSD Fee Study is based on the Statewide student yield averages calculated by the Office of Public School Construction, which utilizes a student yield factor of 0.2 students per household for high school students and 0.5 students per household for elementary/middle school students (Jack Schreder & Associates 2017; California Department of General Services 2012). The CVUHSD Fee Study also provides generation factors for commercial and industrial development. Projections are based on an average of 2.55 employees generated for every 1,000 square feet of commercial/industrial development and 0.27 district households generated for every employee. Development fees are shared between the CVUHSD and its elementary feeder districts, including the LESD, with 35 percent of fees allocated to the high school district and 65 percent of fees allocated to the feeder districts.

LIBRARY FACILITIES

The County of Los Angeles Public Library (LA County Library) provides library services to the County through its 85 library locations, four cultural resources centers, and three bookmobiles. The LA County Library services over 3.4 million residents living in unincorporated areas and 49 incorporated cities in Los Angeles County (Los Angeles County Library 2023a).

The Lawndale Library is a 17,360 square foot facility located at 14615 Burin Avenue within the City (Los Angeles County Library 2023b). It is a part of, and is operated by, the LA County Library system. The library principally serves City residents, though its users may also be drawn from adjacent cities and unincorporated areas.

PARKS

There are six parks, one community center, and one community garden within Lawndale; refer to Section 5.16 of this EIR for more information.

5.15.2 REGULATORY SETTING

FIRE PROTECTION & EMERGENCY SERVICES

State

California Building Code and California Fire Code

The California Building Code is a compilation of building standards, including fire safety standards for new buildings, which are provided in the California Fire Code. The California Fire Code is Chapter 9 of Title 24 of the California Code of Regulations. The California Fire Code provides regulations for safeguarding life and property from fire and explosion hazards derived from the storage, handling, and use of hazardous substances, materials, and devices. The provisions of this code apply to construction, alteration,

movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenance connected or attached to such building structures throughout the state.

California Department of Forestry and Fire Protection

Under Title 14 of the Natural Resources of the California Code of Regulations (CCR), the California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for implementing wildfire planning and protection for State Responsibility Area (SRA) lands. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within the SRA. The CAL FIRE Resource Management Program manages more than 31 million acres of California's privately-owned wildlands, and provides emergency services in 36 of the State's 58 counties via contracts with local governments.

In addition to fighting and planning for wildland fires, CAL FIRE's responsibilities involve responding to other types of emergencies that may occur on a daily basis, including residential or commercial structure fires, automobile accidents, heart attacks, drowning victims, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes.

Under CCR Title 24, Regulations Development, the Office of the State Fire Marshal is responsible for promulgating regulations that promote fire and life safety for inclusion into the State Building Codes, including the California Building Code, California Fire Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Historical Building Code. The process incorporates a great deal of public participation and is guided by the State Building Standards Law.

California Occupational Safety and Health Administration

In compliance with CCR, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of firefighting and emergency medical equipment, among others.

Office of Emergency Services

The State of California passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Mutual Aid Agreements of the California Emergency Services Act

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

Assembly Bill 1600 Mitigation Fee Act

A development impact mitigation fee is a monetary exaction other than a tax or special assessment that is charged by a local governmental agency to an applicant in connection with an approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project (Government Code Section 66000(b)). The legal requirements for enactment of development impact fee program are set forth in Government Code Sections 66000-66025 (the "Mitigation Fee Act"), the bulk of which were adopted as AB 1600 and thus are commonly referred to as “AB 1600 requirements.” A development impact fee is not a tax or special assessment; by its definition, a fee is voluntary and must be reasonably related to the cost of the service provided by the local agency.

AB 1600 mitigation fees imposed by county ordinance are required to be adjusted on an annual basis, with the exception of the Quimby and Fire fees. The mitigation fees are adjusted automatically on July 1st of each fiscal year, by a percentage equal to the appropriate engineering Construction Cost Index as published by Engineering News Record (ENR) for the preceding twelve months.

Local

County of Los Angeles All-Hazard Mitigation Plan (AHMP)

The 2020 County of Los Angeles All-Hazard Mitigation Plan (AHMP) conforms to the requirements of Federal Emergency Management Agency (FEMA) Disaster Mitigation Act of 2000. The 2020 AHMP replaces the AHMP that was approved in 2014. The County developed the 2020 AHMP to cover mitigation responsibilities of County departments (including LACoFD). It helps ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency.

City of Lawndale Local Hazard Mitigation Plan (LHMP)

The City adopted the Local Hazard Mitigation Plan (LHMP) in 2016 to assess natural hazard risk and incorporate mitigation strategies to reduce the potential impact from hazards. It complies with the Federal Disaster Mitigation Act (2000), and Federal Register 44 CFR Parts 201 and 206. The City's Emergency Preparedness Coordinator managed preparation of the LHMP in cooperation with the City’s other departments, community stakeholders, partner jurisdictions, agencies and organizations, and members of the public.

City of Lawndale Emergency Operations Plan (EOP)

The City adopted the Emergency Operations Plan (EOP) in 2011, which was updated in 2015. The EOP addresses the City’s planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City’s emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). The EOP also describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support.

City of Lawndale Municipal Code

Lawndale Municipal Code Chapter 2.44, *Disaster Council,* provides for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations and affected private persons.

Municipal Code Chapter 15.20, *Fire Code*, adopts and incorporates the California Fire Code, as amended by Title 32 the Los Angeles County Fire Code. The Fire Code sets fire safety related building standards and practices to safeguard life and property.

POLICE PROTECTION

State

California Penal Code

The California Penal Code establishes the basis for the application of criminal law in California.

SCHOOLS

State

Kindergarten-University Public Education Facilities Bond Act of 2002 (Prop 47)

This act was approved by California voters in November 2002 and provides for a bond issue to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds will be targeted at areas of greatest need and must be spent according to strict accountability measures. Funds will also be used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California in order to provide adequate higher education facilities to accommodate growing student enrollment.

Assembly Bill 2926

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill (AB) 2926 in 1986. AB 2926 allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

Senate Bill 50 & Proposition 1A

Senate Bill (SB) 50 and Proposition 1A provide comprehensive school facilities financing and reform program, in part by authorizing a school facilities bond issue, school construction cost containment provisions, and an eight-year suspension of the Mira, Hart, and Murrieta court cases, which allowed local governments to deny new development on the basis of inadequate schools. Specifically, the bond funds were to provide for new construction and for reconstruction/modernization needs.

The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstates the school facility fee cap for

legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart, and Murrieta court cases. SB 50 states that these fees are the exclusive means of considering as well as mitigating school impacts caused by new development. Accordingly, these fees limit the scope of impact review in an EIR, the mitigation that can be imposed, and the findings a lead agency must make in justifying its approval of a Project (Government Code Sections 65995-65996). According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions remain in place as long as subsequent State bonds are approved and available.

SB 50 also establishes three levels of Developer Fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. Level One Fees are the statutory fees, which can be adjusted for inflation every two years. Level Two Fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. Level Three Fees come into effect if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies. The school fee amounts provided for in Government Code Sections 65995, 65995.5, and 65995.7 would constitute full and complete mitigation for school facilities.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts, and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

The passage of Proposition 1A in 1998 created the School Facility Program (SFP), in order to streamline the process districts go through to obtain State funding. Pursuant to the SFP, funding for new construction and modernization is provided by the State in the form of per-pupil grants. Generally, projects also require local matching funds. The SFP also implemented numerous reforms intended to streamline the application process, simplify the State facilities program, and create a more transparent and equitable funding mechanism.

5.15.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to public services. A significant impact will occur if implementation of the proposed Project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response to times or other performance objectives for any of the public services:
    - Fire Protection (refer to Impact Statement PS-1);
    - Police Protection (refer to Impact Statement PS-2);
    - Schools (refer to Impact Statement PS-3);
    - Parks (refer to EIR Section 5.16); and
    - Other Public Facilities (refer to Impact Statement PS-4).

5.15.4 IMPACTS AND MITIGATION MEASURES

PS-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **FIRE PROTECTION AND EMERGENCY SERVICES**

Impact Analysis: Development accommodated under the General Plan Update would result in additional residents and businesses in the City. Based on the anticipated growth, as described in Section 3.0, *Project Description*, and summarized in Table 3-4, *General Plan 2045 Buildout by Land Use Designation*, 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,864 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area.

According to LACoFD, there are no plans to expand Station 21 and/or develop a new fire station for Lawndale. Future development projected in the General Plan Update may result in the need for additional LACoFD resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is unknown whether LACoFD would need to expand or construct new facilities to meet the demand of future development in the Planning Area. Future development is assumed to occur over time through 2045; thus, any increase in demand for fire protection services would occur gradually as additional development and associated population growth is added to the City. The General Plan Update includes a range of policies and actions to ensure that fire protection and emergency services are provided in a timely fashion, are adequately funded, are coordinated between the City and the LACoFD, and that new development funds its fair share of services. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities

needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Public Safety Element Policy PS-1.5 supports policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1e directs the investigation and pursuit of available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 directs the collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a promotes the coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. LACoFD would continue to regularly monitor fire department resources to ensure that adequate facilities, staffing, and equipment are available to serve existing and future development and population increases. Further, as development occurs, a proportional increase in property tax, charges for LACoFD services, and other funding sources would increase and offset impacts of new development on LACoFD's existing resources in the City.

Future site-specific development would be required to comply with applicable City, County, and State code and ordinance requirements for fire protection. The Lawndale Municipal Code Chapter 15.20, *Fire Code*, adopts and incorporates the California Fire Code, as amended by Title 32 the Los Angeles County Fire Code, by reference. As part of the development review process, site-specific development proposals would be required to comply with standard LACoFD conditions of approval. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate. Specifically, LACoFD addresses fire and life safety requirements for project construction at the fire plan check stage. This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems. Implementation of all Fire Code requirements would reduce potential impacts concerning fire protection services associated with site-specific development.

As previously stated, new fire facilities would potentially be needed to serve growth contemplated in the General Plan Update. The environmental effect of providing the fire protection and emergency services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does

not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan Update. These impacts are described in the relevant sections (Sections 5.1 through 5.20, and 6.0) of this Draft EIR. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of fire protection and emergency services are less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

PUBLIC SAFETY ELEMENT

Policy PS-1.5: **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

Policy PS-4.1: **Fire Protection Services.** Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4: **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: **Cost Sharing.** Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

PS-2: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **POLICE PROTECTION**

Impact Analysis: Development accommodated under the General Plan Update would result in additional residents and businesses in the City, which would increase demand for police protection services provided by LASD.

Additional facilities, personnel, and equipment may be required to maintain adequate levels of police protection within the City. Development assumed by the General Plan Update is expected to occur gradually over time through 2045; thus, any increase in demand for police protection services would similarly occur gradually as additional development and associated population growth is added to the Planning Area, which also depends on the economic market demands. As individual projects are proposed within the Planning Area, LASD service levels and staffing requirements would be evaluated on an annual basis to determine if additional staffing and/or facilities would be required. If the General Plan Update is adopted, LASD would utilize the projected growth in population, dwelling units, and nonresidential development to effectively plan for increases in population and police protection service demand.

The General Plan Update includes a range of policies and actions, to ensure that adequate police protection services are provided to serve growth associated with implementation of the General Plan Update. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Public Safety Element Policy PS-1.5 supports policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies. Action PS-1e directs the investigation and pursuit of available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment. Proposed Community

Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs the coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

The environmental effect of providing police protection services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development, nor does it designate specific sites for new or expanded public facilities. If new police facilities are needed to serve growth associated with future development anticipated by the General Plan Update, the facilities would most likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan Update. These impacts are described in the relevant sections (Sections 5.1 through 5.20, and 6.0) of this Draft EIR. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of police protection services are less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

PUBLIC SAFETY ELEMENT

Policy PS-1.5: **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Action PS-1e: Investigate and pursue available funding sources to fund safety programs, provide services, upgrade/construct facilities, and purchase equipment.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: **Cost Sharing.** Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

PS-3: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **SCHOOLS**

Impact Analysis: Implementation of the General Plan Update could result in the development of up to 3,942 housing units over existing conditions. School districts typically use student generation factors to determine the potential number of students that would be generated by the amount of residential development in order to accurately anticipate the needs for new/expanded facilities. Table 5.15-2, *LESD/CVUHSD School Districts Student Generation Rates*, identifies the number of potential students that would be generated from development anticipated by the General Plan Update in 2045.

Table 5.15-2
LESD/CVUHSD School Districts Student Generation Rates

Grade Level	Student Generation Factor	Proposed Net Increase Dwelling Units	Total Students Generated
Elementary/Middle School	0.5	3,942	1,971
High School	0.2	3,942	789
		Total	**2,760**

Source: Jack Schreder & Associates, *Level I Developer Fee Study for Centinela Valley Union High School District*, May 26, 2017.

Assuming all new development anticipated under the proposed General Plan Update occurs within the LESD and CVUHSD's school boundary, the Project would generate approximately 2,760 students (1,971 elementary/middle school students and 789 high school students). As mentioned above, the CVUHSD presumes that school facilities have a useful life span of 20 years before modernization is needed in order to maintain the same level of service as previously existed; therefore, the costs of modernized/expanded school facilities are based on anticipated 20-year growth generated by new development within the CVUHSD district area.

The exact location of future development and associated student generation is currently unknown. However, future development projected within the General Plan Update is anticipated to occur gradually through 2045 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually as additional development occurs in the Planning Area. The General Plan Update includes policies and actions, to ensure that adequate services are provided to serve growth associated with implementation of the General Plan Update. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. Policy PF-6.1 encourages the maintenance of high-quality schools and diverse educational opportunities in Lawndale. Policy PF-6.3 directs the City to work with developers and the school districts to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population. Action PF-6a directs the City to work with school districts to ensure adequate school facilities are provided and maintained in the community. This includes consultation with school districts during the processing of development proposals and requiring the mitigation of impacts to schools in compliance with State law.

School districts assess development impact fees against residential and non-residential development to mitigate impacts resulting from the increase in demand for school related services. Pursuant to SB 50, payment of fees to the applicable school district is considered full mitigation for project impacts, including impacts related to the provision of new or physically altered governmental facilities, need for new or

physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or other performance objectives for schools. Therefore, individual development projects in accordance with the General Plan Update would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

The environmental effect of providing school services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development of new or expanded school facilities. If the school districts serving the City determine that new school facilities are needed to serve growth associated with future development anticipated by the General Plan Update, the schools would most likely be provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan Update. These impacts are described in the relevant sections (Sections 5.1 through 5.20, and 6.0) of this Draft EIR. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and development of school facilities would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of schools are less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: **Cost Sharing.** Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy PF-6.1: **Education and Learning.** Continue to encourage the maintenance of high-quality schools and diverse educational opportunities in Lawndale.

Policy PF-6.2: **Lifelong Learning.** Proactively cooperate with the Lawndale Elementary School District and Centinela Valley Union High School District to encourage the provision of lifelong learning opportunities for persons living and working in Lawndale.

Policy PF-6.3: **School Facilities.** Work with developers and the school districts to ensure the payment of fees, construction, and expansion of school facilities to address expected increases in school-age population.

Action PF-6a: Continue to work with the school districts to ensure adequate school facilities are provided and maintained in the community. Specifically, the City should:

- During the processing of residential and non-residential development proposals, ensure the school districts are consulted regarding the potential impact of the project on educational services and facilities. When proposed developments cannot be served by existing facilities and services, the City shall work with the developer and the school district in exploring options for service provision and facility funding.
- Prior to approving a project that is likely to generate students, require the applicant to mitigate school impacts to the full extent permitted by State law through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.
- Cooperate with school districts to update population projections, student generation formulas, potential school sites, and facilities improvement plans.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

PS-4: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **LIBRARY FACILITIES**

Impact Analysis: Development accommodated under the General Plan Update would result in additional residents and businesses in the City, which would potentially increase the demand for public services, including library services. The Lawndale Library is a part of, and is operated by, the LA County Library system.

Future development anticipated by the General Plan Update may result in the need for additional LA County Library resources (i.e., additional staffing, equipment, expanded/new facilities). At this time, it is

unknown whether LA County Library would need to expand or construct new facilities to meet the demand of future development in the Planning Area. Future development is assumed to occur over time through 2045; thus, any increase in demand for library services would occur gradually as additional development and associated population growth is added to the City. The County's library system would continue receiving support for library facilities and resources through the General Plan Update policies and actions. The General Plan Update includes policies and actions to ensure that library services are adequately funded, are coordinated between the City and the LA County Library, and that new development funds its fair share of services. Proposed Land Use Element Policy LU-1.5 directs the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the DOF, SCAG, and County in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Community Facilities Element Policy PF-1.1 requires that the capital improvement program be maintained and financed to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy PF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Policy PF-1.10 ensures collaboration with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development. Action PF-1a directs coordination with outside service providers and other agencies regarding their public facility plans and provides local input on goals, objectives, and projects. Action PF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action PF-1e directs the City to participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region. Policy PF-6.6 directs the City to work with the LA County Library system to provide library facilities and services necessary to meet the needs of all segments of the community. Action PF-6b directs the City to work with the LA County Library system to ensure that library development keeps pace with overall City development and population growth.

The environmental effect of providing library services is associated with the physical impacts of providing new and expanded facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the General Plan Update does not propose or authorize development nor does it designate specific sites for new or expanded public facilities. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan Update. These impacts are described in the relevant sections (Sections 5.1 through 5.20, and 6.0) of this Draft EIR. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts related to the provision of library services are less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal PF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy PF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy PF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy PF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy PF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy PF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy PF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy PF-1.9: **Cost Sharing.** Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy PF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy PF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action PF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action PF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action PF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action PF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action PF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy PF-6.6: **Libraries.** Work closely with the Los Angeles County Library system to provide library facilities and services necessary to meet the needs of all segments of the community.

Action PF-6b: Continue to work with the Los Angeles County Library system to ensure that library development keeps pace with overall City development and population growth.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.15.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis,* establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for public services considers City as well as the service area for LACoFD, LASD, LESD, CVUHSD, and LA County Library.

Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire Protection**

Impact Analysis: As discussed, LACoFD provides fire protection services to the Planning Area. In addition, cumulative projects within the City would receive fire protection services from LACoFD. Similar to future development associated with Project implementation, cumulative development projects would be required to comply with standard LACoFD conditions of approval. LACoFD Fire Prevention Division reviews site plans to ensure that access and water system requirements, which would enhance the proposed development's fire protection, are adequate. Specifically, LACoFD addresses fire and life safety requirements for project construction at the fire plan check stage. This includes plan review of the design details of the architectural, structural, mechanical, plumbing, and electrical systems.

Project implementation may require new or the expanded fire protection facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded fire protection facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Future development within the City and LACoFD service area would be reviewed to determine whether the development being proposed would require new or expanded facilities with the potential for causing significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services, including fire protection, and fire hazards. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of fire facilities to a less than significant level. Thus, the Project's incremental impacts to the provision of fire protection services would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Police Protection:**

Impact Analysis: As discussed, LASD provides police protection services to the Planning Area. In addition, cumulative projects within the City would receive police protection services from LASD. Similar to future development associated with the Project, the LASD would review cumulative development projects development plans and applicants would be required to comply with any specific conditions related to safety and security specified by the LASD.

Project implementation may require new or the expanded police protection facilities. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded police facilities. However, it is anticipated that if new facilities or expansion of facilities are determined necessary, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development projects under the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, or the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts. Future development within the City would be reviewed to determine whether the development being proposed would require new or expanded facilities with the potential for causing significant environmental impacts. The provision of specific facilities or the expansion of facilities would undergo review pursuant to CEQA. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services, including police protection. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of sheriffs' facilities to a less than significant level. Thus, the Project's incremental impacts to the provision of police protection services would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Schools:**

Impact Analysis: Students generated by the implementation of the Project, combined with other relevant cumulative projects within the City and LESD and CVUHSD service areas would combine to result in increased demand on schools within the area. As discussed, CVUHSD has calculated the costs of

modernized/expanded school facilities based on anticipated growth generated by new development within the CVUHSD district area, which includes the City of Lawndale.

As discussed, the exact location of future development and associated student generation is currently unknown. Future development associated with the Project is anticipated to occur gradually through 2045 and would be largely based on market demand. Thus, any increase in demand for school services would occur gradually as additional development occurs in the Planning Area. Future residential development associated with implementation of the Project would be required to comply with SB 50, which would fully mitigate potential impacts related schools. Similarly, the cumulative development projects would be required to pay the statutory fees, so that school facilities can be constructed/expanded, if necessary, to accommodate future students. Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of school facilities to a less-than-significant level. Therefore, the Project's incremental impacts relative to the provision of schools would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

Would the Project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Other Public Facilities**

Impact Analysis: Future Project development and cumulative development may result in the need for additional LA County Library resources and other public facilities. As discussed, future development is assumed to occur over time through 2045; thus, any increase in demand for public services would occur gradually as additional development and associated population growth is added to the City. The General Plan Update includes policies to ensure that library services are adequately funded, are coordinated between the City and the LA County Library, and that new development funds its fair share of services.

Similar to the Project, cumulative development projects within the City would be required to comply with the General Plan Update policies and the established regulatory framework regarding the payment of fees. Any future development of library facilities or other public facilities to serve demand associated with implementation of the proposed Project and cumulative projects would be required to comply with applicable regulations, policies, and standards, and would be subject to CEQA review as appropriate.

Further, future projects implemented under the General Plan Update would be required to be consistent with the General Plan Update policies and actions pertaining to the provision of public services. The polices and actions included within the General Plan Update and compliance with the existing regulatory environment would reduce the cumulative effect of the General Plan Update on the provision of libraries and other public facilities to a less than significant level. Thus, the Project's incremental impacts relative to the provision of other public facilities would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact

5.15.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Public Services impacts associated with the implementation of the General Plan Update would be less than significant; no significant unavoidable public service impacts would occur as a result of the General Plan Update.

5.15.7 REFERENCES

California Department of General Services, *November 28, 2012 State Allocation Board Program Review Subcommittee*, November 2012.

Federal Bureau of Investigation, *Offenses Known To Law Enforcement, Table 8: California, by City*, https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-8/table-8-state-cuts/california.xls, accessed July 7, 2023a.

Federal Bureau of Investigation, *Crime in the United States, Table 6: by Metropolitan Statistical Area*, https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-8/table-8-state-cuts/california.xls, accessed July 7, 2023b.

Jack Schreder & Associates, *Level I Developer Fee Study for Centinela Valley Union High School District*, May 26, 2017.

Los Angeles County Fire Department (LACoFD), *2021 County of Los Angeles Fire Department Annual Report*, July 2022.

Los Angeles County Fire Department (LACoFD), mail correspondence, Ronald Durbin, Chief, Forestry Division Prevention Services Bureau, March 22, 2023a.

Los Angeles County Fire Department, *Educational Programs and Events*, https://fire.lacounty.gov/, accessed July 7, 2023b.

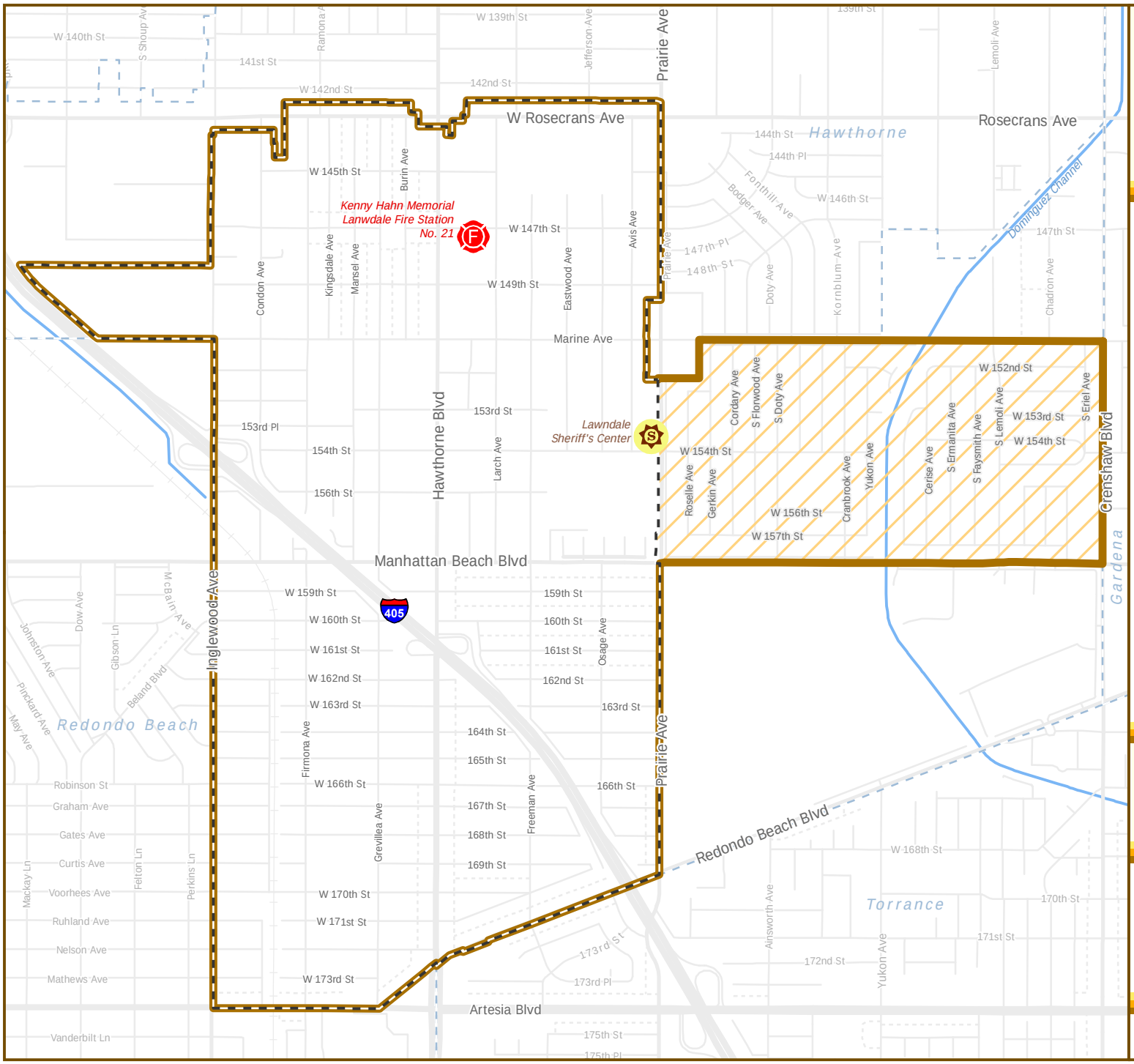
Los Angeles County Sheriff's Department (LASD), mail correspondence, Robert Luna, Sheriff, April 19, 2023.

Los Angeles County Library, *About the Library*, https://lacountylibrary.org/aboutus/, accessed March 8, 2023a.

Los Angeles County Library, *Lawndale Library*, https://lacountylibrary.org/lawndale-library/, accessed March 8, 2023b.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.15-1. Public Safety Facilities



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Fire Station
- Sheriff Station

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 26, 2023.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.16 PARKS AND RECREATION

This section describes the availability and anticipated demand on parks and recreation opportunities within the Planning Area, and identifies and addresses potential impacts from implementation of the General Plan Update related to parks and recreational facilities.

5.16.1 ENVIRONMENTAL SETTING

The City of Lawndale Parks and Recreation Division, under the Community Services Department, oversees and manages parks and recreational facilities within the City.

PARKS

Similar to many cities in Los Angeles County, Lawndale is a developed community and therefore has limited opportunities to expand its parks and recreation resources. The two primary forms of parkland within the City are City-owned parks and parks that are contracted through a Joint Powers Agreement with the Lawndale Elementary School District for utilization by the City's residents. There are six parks within Lawndale, as shown in Table 5.16-1, *Existing Parkland and Recreational Uses in the Planning Area.* There are no parks located within the City's Sphere of Influence (SOI).

Alondra Community Regional Park, located just outside of the Planning Area along the southern boundary of the SOI, also provides recreation opportunities to residents in Lawndale due to its close proximity. The 53-acre Alondra Park is part of the Los Angeles County parks system and includes amenities such as baseball/softball fields, playgrounds, picnic tables, a skate park, a splash pad, fishing lakes, fitness courses, outdoor stages, and basketball courts (Los Angeles County 2023).

Table 5.16-1
Existing Parkland and Recreational Uses in the Planning Area

Name	Acres	Location	Amenities
Hogan Park	0.75	4045 West 167th Street	6 Picnic Tables, 2 Playgrounds, 2 Picnic Shelters, 1 Outdoor Fitness Space, 1 Restroom and Open Green Space.
Hopper Park	0.63	4418 West 162nd Street	2 Covered Picnic Areas, 1 Fitness Zone, 1 Full-size Playground, 1 Mini Playground/Sand Play Area, 1 Restroom and Open Green Space.
Jane Addams Park*	4.59	15114 Firmona Avenue	3 Outdoor Basketball Courts, 3 Baseball Diamonds, 1 Multi-use Athletic Field, 3 Playgrounds, 1 Wading Pool, 1 Recreation Office, 2 Restrooms, 1 Picnic Area and Open Green Space.
Larry R. Rudolph Park	1.44	14725 Larch Avenue	1 Covered Picnic Area, 1 Fitness Zone, 1 Walking Trail, 1 Playground, 1 View Deck, 1 Performance Stage, 1 Restroom and Open Green Space.
Rogers/Anderson Park*	14.73	4161 West Manhattan Beach Boulevard	6 Outdoor Basketball Courts, 1 Full-size Baseball Field, 1 Soccer Field, 1 Multi-use Athletic Field, 2 Playgrounds, 1 Gymnasium, 1 Restroom and Open Green Space.
William Green Park*	4.06	4558 West 168th Street	6 Outdoor Basketball Courts, 1 Skin Softball Diamond, 1 Multi-use Athletic Field, 1 Recreation Office, 1 Community Room, 2 Playgrounds, 1 Restroom and Open Green Space.
Total	*26.2*		

Sources: City of Lawndale, *City Parks and Recreation Facilities*, https://www.lawndalecity.org/cms/One.aspx?portalId=16676137&pageId=17108215, accessed March 8, 2023; Los Angeles County, *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment*, May 2016.

Notes:

* Designates parks contracted through Joint Powers Agreement with the Lawndale School District.

COMMUNITY RECREATION FACILITIES

In addition to the six parks shown in Table 5.16-1, Lawndale has one community recreational center and one community garden. The primary community recreation facility in Lawndale is the Harold E. Hofmann Community Center, located at 14700 Burin Avenue. The approximately 41,000 square foot Community Center features a multi-purpose room with a stage, full-service kitchen, meeting rooms, a dance room, a computer room, an exercise room, common areas, terraces, and offices for the City's Community Services Department. The Community Center offers programs, classes, and events for families and individuals of all ages. The McKenzie Community Garden, located at 4324 West 160th Street, consists of 44,200-square-foot garden plots available for lease to residents, along with storage sheds, a picnic area, and a restroom.

5.16.2 REGULATORY SETTING

STATE

Mitigation Fee Act

The California Mitigation Fee Act, Government Code Sections 66000, et seq., allows cities to establish fees which would be imposed upon development projects for the purpose of mitigating the impact that the development projects have upon the City's ability to provide specified public facilities. In order to comply with the Mitigation Fee Act, the City must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; 3) For fees that have been in the possession of the City for five years or more and for which the dollars have not been spent or committed to a project, the City must make findings each fiscal year describing the continuing need for the money; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

California Public Park Preservation Act of 1971

The California Public Park Preservation Act is the primary measure for protecting and preserving parkland in California. The legislation states that "No city, city and county, county, public district, or agency of the state, including any division department or agency of the state government, or public utility, shall acquire any real property, which property is in use as a public park at the time of such acquisition, for the purposes of utilizing such property for any non-park purpose, unless the acquiring entity pays or transfers to the legislative body of the entity operating the park sufficient compensation or land, or both."

Quimby Act

The Quimby Act of 1975, (California Government Code § 66477), commonly called the "Quimby Act", allows a city or county to pass an ordinance that requires, as a condition of approval of a subdivision, either the dedication of land, the payment of a fee in lieu of dedication, or a combination of both for park and recreational purposes allows a city or county to require a maximum parkland dedication standard of three acres of parkland per 1,000 residents for new subdivision development unless the jurisdiction can demonstrate that the amount of existing neighborhood and community parkland exceeds that limit. In accordance with Section 66477, a jurisdiction may establish a parkland dedication standard based on its existing parkland ratio, provided required dedications do not exceed five acres per 1,000 persons.

LOCAL

Lawndale Municipal Code

Lawndale Municipal Code Chapter 12.34, *Park Development Fees*, provides for the payment of park facilities impact fees applicable to dwelling units constructed, enlarged, or remodeled in the City.

5.16.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to recreational facilities and amenities as well as parks (listed under Public Services). The issues presented in the Initial Study Environmental Checklist for both parks and recreational facilities have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (refer to Impact Statement PR-1);
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (refer to Impact Statement PR-2); and/or
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response to times or other performance objectives for any of the public services: Parks (refer to Impact Statement PR-2)?

5.16.4 IMPACTS AND MITIGATION MEASURES

PR-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Impact Analysis: Development accommodated under the General Plan Update is expected to result in increased population and employment growth within the Planning Area, and thus, an overall increase in the demand for parks and recreational facilities. Based on the anticipated growth, as described in Section 3.0, and summarized in Table 3-4, *General Plan 2045 Buildout by Land Use Designation*, 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, resulting in an additional population of 9,482 people within the Planning Area. These new residents are expected to use park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. The additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown.

As shown in Table 5.16-1, there are six parks totaling 26.2 acres within the Planning Area, indicating that the City currently provides approximately 0.7 acres of parkland for every 1,000 people, based on the current (2022) Planning Area population of 37,948. The City does not currently have an adopted standard of parkland acreage to residents. However, the General Plan Update does include the adoption of a parkland standard of 3.0 acres of parkland per 1,000 residents. The City's existing parkland deficit, based on the Quimby Act minimum ratio of 3.0 acres of parkland per 1,000 residents, is currently being offset

through dedication fees, pursuant to Lawndale Municipal Code Chapter 12.34, *Park Development Fees*, which provides for the payment of park facilities impact fees applicable to dwelling units constructed, enlarged, or remodeled in the City. The provision of new parks and recreation facilities would help to reduce the potential for adverse impacts and physical deterioration of existing parks and recreation facilities, by providing additional facilities to accommodate the demand for parks and recreation facilities. These new facilities would be provided at a pace and in locations appropriate to serve new development.

Development under the General Plan Update could indirectly lead to the construction of new parks and recreation facilities to serve new growth and to meet existing parks and recreation needs. The General Plan Update supports the creation of new parks and recreation facilities to accommodate a wide range of activities for all age groups. Proposed Resource Management Element Policy RM-1.1 strives to provide residents with a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities. Policy RM-1.2 strives to achieve a minimum parkland standard of three acres per 1,000 City residents. Policy RM-1.4 directs the City to actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs. Policy RM-1.5 directs City collaboration with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public. Policy RM-1.8 recognizes the value of non-traditional public and semi-public open space and encourages creativity and innovation during the development and provision of additional open space or parks to supplement the City's green space and parks. Action RM-1a directs the City to periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development. Action RM-1b directs the City to pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance. Action RM-1c directs the creation of a Master Parks Plan to guide the provision and maintenance of parkland in the City. Action RM-1d works with the Lawndale Elementary School District to maximize the joint use of facilities and pursues additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

The General Plan Update does not specifically propose any development projects, including parks. As a result, site-specific physical impacts of future park development and construction cannot be determined until projects are brought forward for review. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

In addition to ensuring that new and expanded parks and recreation facilities are provided to accommodate new growth, the General Plan Update includes policies and actions to ensure that parks and recreation facilities are adequately maintained and improved to serve both existing and planned growth. Proposed Land Use Element Policy LU-1.5 requires the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to regularly review and adjust population assumptions and forecasts in order to adequately plan for growth. Proposed Community Facilities Element Policy CF-1.1 maintains and finances the capital improvement program to ensure the timely implementation of the

General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy CF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Action CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Although implementation of the General Plan Update would cause an incremental increase in demand for parks in the future, this increase could be reduced to a less than significant level by the provision of public parkland and private on-site recreational amenities and through the payment of park fees, as established in Municipal Code Chapter 12.34, *Park Development Fees*. Compliance with and the implementation of applicable General Plan Update policies and actions and compliance with the City Municipal Code would ensure parks and recreational facilities would not be overused to the point of substantial deterioration.

As stated, the General Plan Update does not propose or approve the construction or expansion of parks or recreational facilities. Any new parks or recreational facilities that may be constructed in the future would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the parks and recreational facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects anticipated under the General Plan. These impacts are described in the relevant chapters (Sections 5.1 through 5.20, and 6.0) of this EIR. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan Update, and would be subject to CEQA review as appropriate. Therefore, impacts to parks and recreational facilities associated with implementation of the General Plan Update would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Recreation Types.** Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.2: **Parkland Standard.** Achieve a minimum parkland standard of 3 acres per 1,000 City residents.

Policy RM-1.4: **Parkland Funding.** Actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs.

Policy RM-1.5: **Partnerships and Joint-Use Agreements.** Collaborate with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public.

Policy RM-1.8: **Creative Open Space and Parks.** Recognize the value of non-traditional public and semi-public open space and encourage creativity and innovation during the development and provision of additional open space or parks, including but not limited to plazas, parklets, pedestrian paths, patios, rooftop gardens, community gardens, parkways, green space integrated into parking structures, and temporary or semi-permanent gathering spaces, to supplement the City's green space and parks.

Action RM-1a: Periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1d: Continue to work with the Lawndale Elementary School District to maximize the joint use of facilities and pursue additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

PR-2: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?

Impact Analysis: No site-specific projects are proposed under the General Plan Update. As stated, 2045 buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units and an additional population of 9,482 people. Based on the General Plan Update's proposed standard of three acres per 1,000 residents, the increase in population due to implementation of the Project would require approximately 96.1 acres of additional parkland, for a total of 122.3 acres of parkland.

Construction of these future parks could result in environmental impacts. At the time future parks are proposed, they would require a separate environmental review and compliance with regulations in existence at that time, which would address potential environmental impacts related to the construction and operation of new parks. Furthermore, these future parks would be subject to General Plan Update policies and actions intended to protect the environment and the programmatic mitigation framework established in this EIR. Proposed Land Use Element Policy LU-1.5 requires the City to maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community. Action LU-1e directs the City to regularly review and adjust population assumptions and forecasts in order to adequately plan for growth. Policy LU-2.6 provides notification to adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and takes appropriate action to consider and respond to their concerns. Proposed Resource Management Element Policy RM-1.1 strives to provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities. Policy RM-1.4 directs the City to actively pursue financing for parkland acquisition and maintenance, and allocates sufficient funding to park development to support the community's recreational needs. Policy RM-1.5 directs City collaboration with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public. Action RM-1a directs the City to periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development. Action RM-1b directs the City to pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance. Action RM-1c directs the creation of a Master Parks Plan to guide the provision and maintenance of parkland in the City. Action RM-1d works with the Lawndale Elementary School District to maximize the joint use of facilities and pursues additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs. Proposed Community Facilities Element Policy CF-1.1 maintains and finances the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements. Policy CF-1.2 ensures that new development and major redevelopment provides for and funds its fair share of the costs for the expansion of public infrastructure, public services, and other public facilities. Action CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Therefore, upon compliance with environmental regulations established at the time future park and recreational projects are proposed, and adherence to General Plan Update policies and actions, the environmental impacts associated with the construction or expansion of recreational facilities would less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.5: **Public Services for Quality of Life.** Maintain appropriate sites for institutional and public facility uses that can accommodate the infrastructure and facilities needed to serve the community.

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.1: **Recreation Types.** Provide residents a variety of useable and accessible public recreational lands, facilities, trails, open space, and amenities.

Policy RM-1.4: **Parkland Funding.** Actively pursue financing for parkland acquisition and maintenance, and allocate sufficient funding to park development to support the community's recreational needs.

Policy RM-1.5: **Partnerships and Joint-Use Agreements.** Collaborate with school districts, local and regional agencies, and private developers to create partnerships and joint-use agreements that broaden the range of recreation facility options available to the public.

Action RM-1a: Periodically review and update the park development fee ordinance as necessary to better reflect current costs and needs to address park demand generated by infill development.

Action RM-1b: Pursue available resources to fund recreation facilities and parkland acquisition, development, and maintenance, including but not limited to, State and Federal grants, special districts, private donations, gifts, and endowments.

Action RM-1c: Prepare and adopt a Master Parks Plan to guide the provision and maintenance of parkland. The Master Park Plan should be designed to serve as a statement of general policy and desired City standards for location and development of public parks and community open space areas, with definite time frames outlined.

Action RM-1d: Continue to work with the Lawndale Elementary School District to maximize the joint use of facilities and pursue additional partnerships with public and private entities, including adjacent jurisdictions, for the joint use of and expanded access to, regional parks, open space, and recreational programs.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Action CF-1b Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis,* establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The geographic setting for parks and recreation facilities considers the City and County.

Would the project, combined with other relevant cumulative projects, result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?

Would the Project, combined with other relevant cumulative projects, increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Would the Project, combined with other relevant cumulative projects, include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis: Future development associated with the General Plan Update, combined with other relevant cumulative projects, would bring new residents to the Planning Area. These new residents are expected to use existing park and recreational facilities, and this additional use may result in greater demands on parks and recreational facilities in the Planning Area such that deterioration of these facilities could occur or be accelerated. Additionally, the additional demand on existing parks and recreational facilities would increase the need for maintenance and improvements. These improvements could have potential environmental impacts, although the exact impacts cannot be determined since the potential improvements are currently unknown. As future parks and recreation projects are considered by the City, each project will be evaluated for conformance with the General Plan Update, Municipal Code, and other applicable regulations. Parks and recreation projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA.

As discussed, although implementation of the Project would cause an increase in demand for parks in the future, potential impacts could be reduced to a less than significant level through the payment of park fees, as established in Municipal Code Chapter 12.34, and adherence to local regulations established in the Municipal Code and General Plan Update policies and actions, which support the creation of new parks and recreation facilities, to accommodate a wide range of activities for all age groups. Similarly, cumulative development projects would be required to comply with Municipal Code and General Plan Update policies regarding parks and recreation facilities, including compliance with CEQA associated with any site-specific development of parks or recreational facilities. Thus, the Project's incremental impacts associated with parks and recreational facilities would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Park and recreation impacts associated with implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to parks and recreation facilities would occur as a result of the General Plan Update.

5.16.7 REFERENCES

City of Lawndale, City Parks & Recreation Facilities, https://www.lawndalecity.org/cms/One.aspx?portalId=16676137&pageId=17108215, accessed March 8, 2023.

City of Lawndale. Personal correspondence, Mike Estes, Director of Community Services. April 20, 2022.

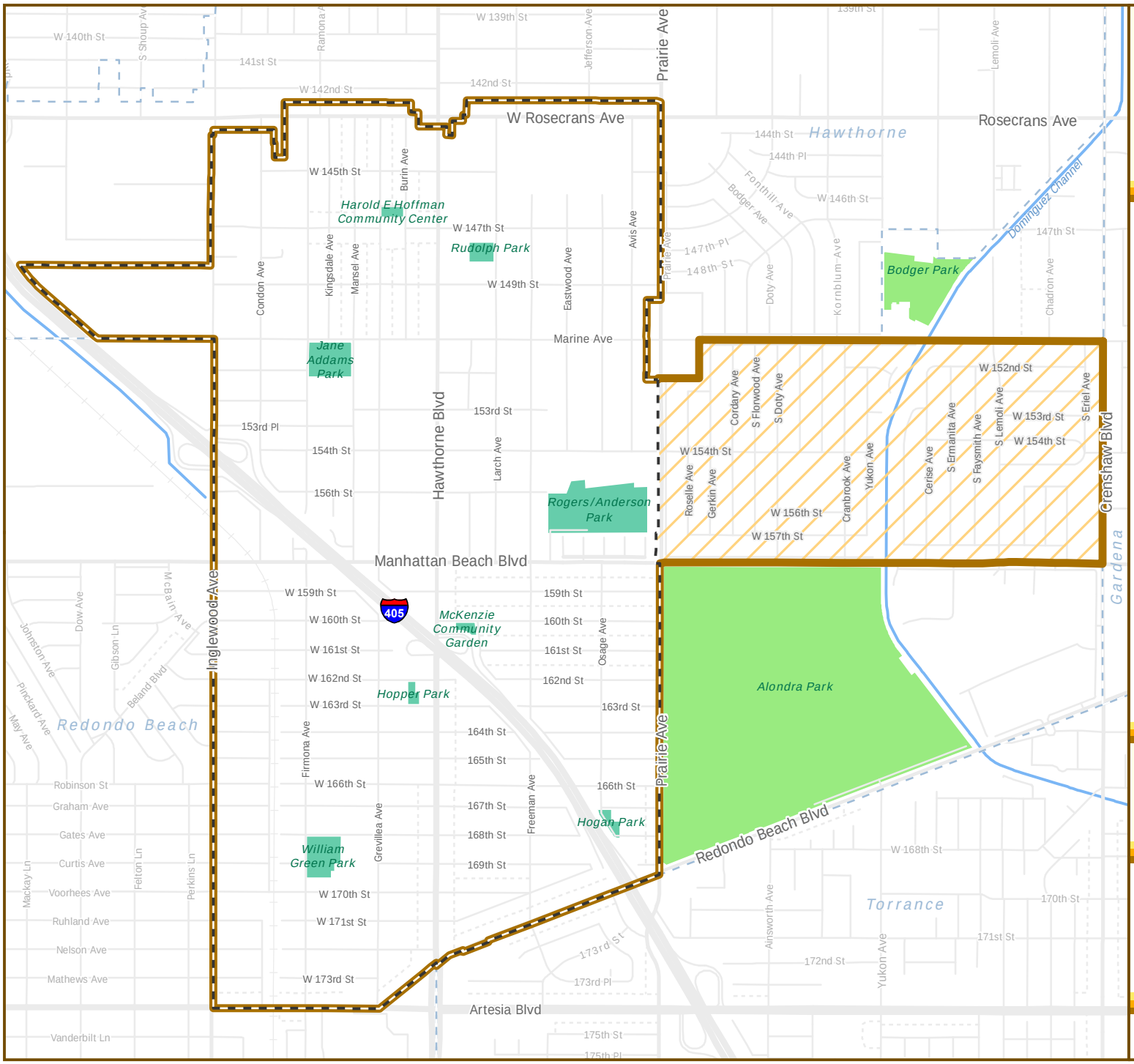
Los Angeles County, *Alondra Community Regional Park*, https://parks.lacounty.gov/alondra-community-regional-park/#, accessed July 7, 2023.

Los Angeles County, *Los Angeles Countywide Comprehensive Parks & Recreation Needs Assessment, Appendix A*, May 2016.

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.16-1. Parks and Recreation Facilities



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Lawndale City Park
- Los Angeles County Park

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 26, 2023.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.17 TRANSPORTATION

5.17.1 PURPOSE

This section describes the existing physical and operational conditions for the transportation system and provides an analysis of potential impacts to the transportation system associated with adoption and implementation of the General Plan Update. The impact analysis examines the roadway, transit, bicycle, and pedestrian components of the City's transportation system. This section is based on the *Lawndale General Plan CEQA Transportation Analysis*, prepared by Kittelson & Associates, Inc., dated July 12, 2023, and included as Appendix F, *Transportation Impact Analysis*.

Under Senate Bill 743 as of July 1, 2020, local agencies may no longer rely on roadway/intersection delay and capacity-based analyses for California Environmental Quality Act (CEQA) purposes. Agencies must analyze transportation impacts utilizing vehicle miles travelled (VMT), which measures the number of vehicle trips generated by a project and their average distance of travel to and from a project. These are calculated and assessed as rates (e.g., per capita for residential projects or per employee for commercial projects). The previous method of analyzing transportation impacts measured travel time delay at intersections and roadway segments and was assessed using a Level-of-Service (LOS) grade from LOS A to LOS F. Travel delay as measured by LOS is no longer a CEQA-related topic and is not discussed in this EIR.

5.17.2 ENVIRONMENTAL SETTING

EXISTING ROADWAY NETWORK

Freeways

Interstate 405 (I-405) is a major north-south interstate freeway that connects I-5 to coastal cities within the Los Angeles Basin, between west Los Angeles and Orange County. The freeway traverses the City of Lawndale from the northwest to the southeast.

Local Roadways

The City is supported by a network of core regional streets, including Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Manhattan Beach Boulevard, Marine Avenue, Rosecrans Avenue, Redondo Beach Boulevard, and Artesia Boulevard, plus several smaller connecting streets that provide local connectivity. Much of the street network was designed to prioritize cars over other modes of transportation. This is demonstrated by the abundance of public parking, wide streets and travel lanes, and limited pedestrian and bicycle connectivity and amenities. Key streets within the City are discussed below.

Hawthorne Boulevard is a major north-south roadway that spans the length of the City. It is a six to eight lane corridor (with three to four lanes in each direction) with on-street parking and a wide center median which is used for parking in some sections. The travel lanes are generally 12 to 14 feet wide, with wider outside lanes to accommodate on-street parking. On-street curbside parallel parking is permitted on both sides of Hawthorne Boulevard during specific timeframes. Two-hour parking is permitted in the center median outside the hours of 2:00 a.m. to 4:00 a.m. The surrounding land issues are primarily commercial, and the corridor provides direct access to I-405 south of Manhattan Beach Boulevard. Hawthorne

Boulevard acts as a major transit corridor, serving transit riders through LA Metro lines 40 and 740 (Rapid), as well as through Lawndale Beat's Express and Residential Routes. The posted speed limit is 35 miles per hour. South of I-405, Hawthorne Boulevard is also known as California State Route 107 (SR-107). Hawthorne Boulevard is under Caltrans jurisdiction; however, the City of Lawndale maintains it within City limits.

Inglewood Avenue is a major north-south connection through the City and forms the majority of Lawndale's western boundary. Inglewood Avenue includes an interchange with I-405 south of Marine Avenue. South of I-405, where Inglewood Avenue abuts mostly residential land uses, the corridor is divided by a median. Three travel lanes are provided in each direction, with the outside lanes serving as flex lanes between through travel lanes and on-street parking. On-street parking is not permitted in the northbound direction from 7:00 a.m. to 9:00 a.m. daily and Monday and Thursdays from 4:00 p.m. to 7:00 a.m. In the southbound direction, on-street parking is not permitted from 3:00 p.m. to 7:00 p.m. and on Wednesdays from 11:00 a.m. to 2:00 p.m. North of I-405, the surrounding land use include commercial properties, and the roadway has two to three lanes in each direction with a center turn lane and no on-street parking. Between Marine Avenue and Rosecrans Avenue, there are several schools and a major commercial/shopping center. The posted speed limit is 40 miles per hour south of I-405 and 35 miles per hour north of I-405.

Prairie Avenue runs in the north-south direction and forms the eastern boundary of Lawndale. It primarily includes two travel lanes in each direction with a two-way center left-turn lane. On-street parking is available throughout the corridor, except for northbound, north of Manhattan Beach Boulevard. South of Marine Avenue, Prairie Avenue is mostly residential and is adjacent to Alondra Park and Golf Course, Will Rogers Middle School, and Anderson Elementary School. North of Marine Avenue, the roadway is surrounded by commercial uses, including a major shopping area at Rosecrans Avenue. The posted speed limit is 40 miles per hour.

Manhattan Beach Boulevard is an east-west corridor that connects Lawndale to Manhattan Beach to the west and Gardena to the east. It has two lanes in each direction, divided by a median. On-street parking is available on both sides of the street. Manhattan Beach Boulevard passes through an industrial area between Inglewood Avenue and I-405, crossing the Harbor Subdivision railway line. East of I-405, it provides access to residential areas and intermittent commercial development. Manhattan Beach Boulevard does not provide direct access to I-405. The posted speed limit is 40 miles per hour.

Marine Avenue is an east-west corridor with two lanes in each direction, undivided with an intermittent center left-turn lane. On-street parking is available in both directions except on Tuesday and Fridays from 4:00 a.m. to 7:00 a.m. Marine Avenue is mostly adjacent to commercial and light industrial land uses and provides access to several key destinations, including the LA Metro C Line (Green Line) station, Lawndale High School, and Jane Addams Park. The posted speed limit is 40 miles per hour.

Rosecrans Avenue is a major east-west corridor that forms the northern boundary of the City. Rosecrans Avenue has three travel lanes in each direction with a continuous center left-turn lane. On-street parking is available outside the hours of 6:30 a.m. to 6:00 p.m. on both sides of the road. Major commercial and residential developments and schools, including Leuzinger High School, are present along the corridor. The posted speed limit is 40 miles per hour.

Redondo Beach Boulevard runs along the southern boundary of the City and is a major thoroughfare connecting Lawndale to Gardena in the east. The corridor has two travel lanes in each direction with a continuous center left-turn lane. On-street parking is permitted throughout from 7:00 a.m. to 6:00 p.m., except Tuesdays and Fridays from 4:00 a.m. to 7:00 a.m. Land uses along the corridor are primarily a mix of multi-family residential and commercial. The corridor also provides access to the I-405 freeway. The posted speed limit is 35 miles per hour.

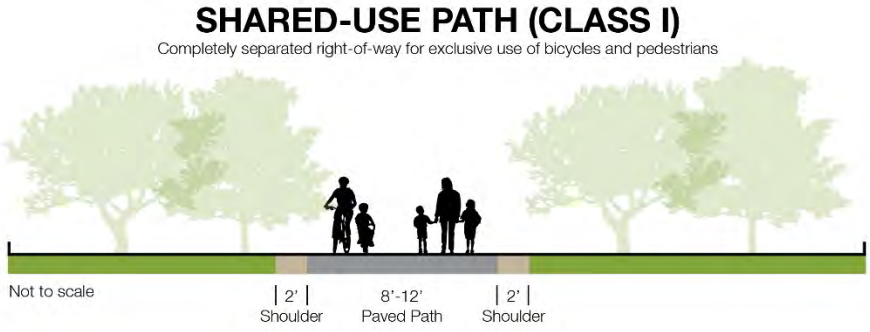
Artesia Boulevard is an east-west corridor along the southern boundary of the city. Artesia Boulevard has three travel lanes in the eastbound direction and two travel lanes in the westbound direction with a raised center median. On-street parking is available in the westbound direction only. The corridor provides direct access to numerous commercial uses, including the South Bay Galleria mall. The posted speed limit is 35 miles per hour.

BICYCLE FACILITIES

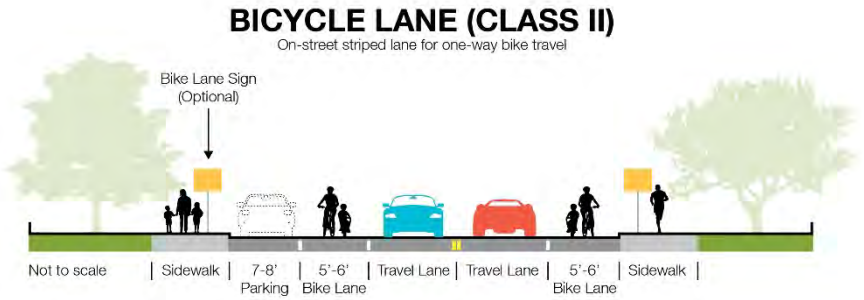
The City of Lawndale does not currently provide any bicycle facilities on its street network. Facilities have been proposed through several documents and plans, including the South Bay Bicycle Master Plan (2011), the Los Angeles County Bicycle Master Plan (2012), and the LA Metro Bicycle Transportation Strategic Plan (2006). However, there are currently no bike-related projects included in Lawndale's Capital Improvements Program.

Figure 5.17-1, *Existing and Planned Bicycle Facilities*, displays existing and planned bicycle facilities in the City and its immediate vicinity. The California Department of Transportation (Caltrans) categorizes bicycle facilities into four types, as described and depicted in the illustrations below. Note that while the graphics include typical widths for the various facilities, the exact configuration of a bike facility can vary depending on its location and the jurisdiction's preferences.

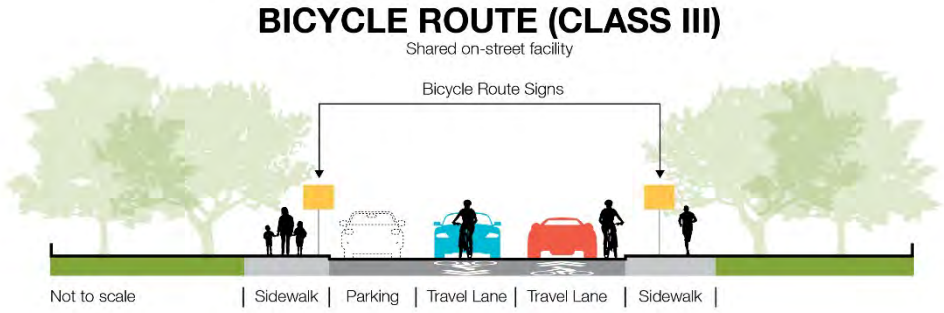
- **Class I Bikeway (Bike Path).** Also known as a shared path or multi-use path, a bike path is a paved right-of-way for bicycle travel that is completely separate from any street or highway.



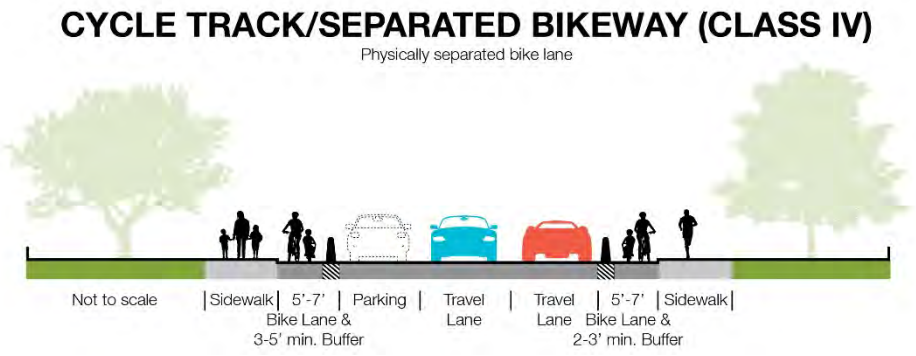
- **Class II Bikeway (Bike Lane).** A striped and stenciled lane for one-way bicycle travel on a street or highway. This facility could include a buffered (typically painted) space between the bike lane and vehicle lane and the bike lane could be adjacent to on-street parking.



- **Class III Bikeway (Bike Route).** A signed route along a street where the bicyclist shares the right-of-way with motor vehicles. This facility can also be designated using a shared-lane marking (sharrow).



- **Class IV Bikeway (Separated Bike Lane).** A bikeway for the exclusive use of bicycles including a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.



I-405 represents a major barrier for bicyclists in both the north/south and east/west directions. The only roadways that provide access under the freeway are Inglewood Avenue, Hawthorne Boulevard, Manhattan Beach Boulevard, 166th Street, and Redondo Beach Boulevard. The Metro rail right-of-way (ROW) also presents a challenge to bicyclists, especially in the residential area south of Manhattan Beach Boulevard. The only available railway crossings south of Manhattan Beach Boulevard are at 159th Street, 160th Street, 161st Street, 162nd Street, and 170th Street.

PEDESTRIAN FACILITIES

Most streets have paved sidewalks on both sides of the street. Crosswalks are generally provided at signalized or stop-controlled intersections on the arterial and collector roads. They are generally standard crosswalks and on all four approaches. Skewed crossings are common along principal arterials and cause longer pedestrian crossing times and distances. The City's overall automobile-centric design creates long walking distances due to the nature of larger block sizes.

The City of Lawndale offers several types of facilities and amenities that support walking in the City. The availability and quality of pedestrian facilities vary throughout the City and were analyzed using seven key factors as shown in 5.17-1, *Pedestrian Facility Conditions in Lawndale*.

Table 5.17-1
Pedestrian Facility Conditions in Lawndale

Factor	Assessment	Overview of Conditions
Sidewalk Availability	+	Sidewalks are generally provided on both sides of streets across the City. No significant gaps were identified across the City.
Sidewalk Conditions	−	Sidewalks on local streets in residential neighborhoods throughout the City are generally in good condition, free of cracks or uplifts. While sidewalks are present along major corridors (such as Redondo Beach Boulevard, Manhattan Beach Boulevard, Inglewood Avenue, and Marine Avenue) conditions range from poor to fair, with some areas experiencing uplifts, cracks, and uneven surfaces.
Crosswalk Availability	+	Marked crosswalks are consistently provided at major intersections across the City. While marked crosswalks are provided at major intersections, approximately half of the intersections have faded markings.
Shading	−	Shading is provided across the City in the form of tree landscaping on both sides of local streets. Less shading is observed, however, on Rosecrans Avenue, Prairie Avenue, and Crenshaw Boulevard.
Flat Grade	+	The City road network is generally flat without steep grade changes at the pedestrian level.
Buffer	−	Within Lawndale's residential neighborhoods, buffers consist of grass, trees, and other landscaping. Along major corridors, however, sidewalks are generally constructed adjacent to the roadways; many streets allow on-street parking.
Amenities	−	Within Lawndale's residential neighborhoods, the primary amenity is street landscaping. There are six neighborhood parks, including William Green Park, Roger Anderson Park, and Jane Addams Park, that are accessible to pedestrians. Major roads, however, offer few pedestrian-level amenities, and retail is generally not pedestrian-facing.

Legend

+	Facilities are generally present and in good condition	−	Facilities are generally not present or in poor condition

Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.

TRANSIT SERVICE

Transit service in the Planning Area is provided primarily by the Los Angeles County Metropolitan Transportation Authority (LA Metro) and the Lawndale Beat. LA Metro provides bus and passenger rail service throughout Los Angeles County. The Lawndale Beat runs a fixed-route bus service throughout the City of Lawndale. The adjacent cities of Gardena and Torrance also provide local transit options that operate through Lawndale. Figure 5.17-2, *Existing and Planned Transit Routes*, displays existing and planned transit routes that serve Lawndale.

Los Angeles County Metropolitan Transportation Authority (LA Metro)

LA Metro provides bus, light rail, and heavy rail service for travel within Los Angeles County. LA Metro currently offers bus service throughout the City, including local and rapid fixed-route services. LA Metro's transit stops are often shared stops with the Lawndale Beat. Three major shared transit stops are located just outside of the City limits: at the LA Metro C Line (Green Line) terminus near Marine Avenue and Redondo Beach Avenue; on Douglas Street north of Rosecrans Avenue; and at South Bay Galleria south of Artesia Boulevard.

Table 5.17-2, *LA Metro Bus Service in Lawndale*, describes the local LA Metro Bus routes in the City. While LA Metro does not offer rail service through Lawndale, the C Line (Green Line) ends just west of the City limits at the Redondo Beach Station on Marine Avenue, west of I-405. Metro has conducted an environmental analysis and is considering alignments to extend the C Line (Green Line) approximately 4.6 miles south through Lawndale into Torrance by 2028.

Table 5.17-2
LA Metro Bus Service in Lawndale

Route	Route Type	Description
40	Local	Downtown Los Angeles to South Bay Galleria via Martin Luther King Boulevard and Hawthorne Boulevard
125	Local	El Segundo to Norwalk Station via Rosecrans Avenue
210	Local	Hollywood/Vine Station to South Bay Galleria via Crenshaw Boulevard
211/215	Local	Inglewood to South Bay Galleria via Prairie Avenue/Inglewood Avenue
Source: *Lawndale General Plan CEQA Transportation Analysis*, prepared by Kittelson & Associates, Inc., dated July 12, 2023.		

Lawndale Beat

Lawndale Beat provides a local transit option through the operation of two fixed-route bus routes: Express Route and Residential Route. The Express Route offers service from LA Metro's C Line (Green Line) Station on Marine Avenue to the Galleria at South Bay shopping area south of Artesia Boulevard on Hawthorne Boulevard. The Residential Route provides service to various residential areas, parks, schools, and shopping areas.

The Express Route operates with a 40-minute headway, running from 7:20 a.m. to 5:55 p.m. on weekdays, 8:40 a.m. to 5:55 p.m. on Saturdays, and 9:20 a.m. to 3:55 p.m. on Sundays and holidays. The Residential

Route has a 50-minute headway, running from 7:00 a.m. to 6:39 p.m. on weekdays, 8:40 a.m. to 5:49 p.m. on Saturdays, and 10:20 a.m. to 5:49 p.m. on Sundays and holidays. Stops for both routes are often shared with LA Metro routes.

Other Transit Agencies

The neighboring cities of Gardena and Torrance operate fixed-route bus service that serves areas within and surrounding Lawndale. Gardena's GTrans Line 1X runs along Marine Avenue through Lawndale, connecting Gardena to LA Metro's C Line (Green Line); and Line 3 runs along Redondo Beach Boulevard to South Bay Galleria. Torrance Transit's Lines 2, 8, and 13 also run through Lawndale along Artesia Boulevard, the City's southern boundary.

FREIGHT AND GOODS MOVEMENT

The Surface Transportation Assistance Act (STAA) of 1982 defines a network of state facilities as truck routes which accommodate large trucks. I-405, which runs through Lawndale, is an STAA-designated truck route. Lawndale's Municipal Code also designates several local roads as local truck routes. Changes to the truck route network are subject to public hearings and consideration by the Traffic Safety Commission and City Council prior to their adoption. These routes are described in Table 5.17-3, *Existing Truck Routes* and displayed in Figure 5.17-3, *Existing Truck Routes*.

Table 5.17-3
Existing Truck Routes

On Road	From Road	To Road	Direction of Travel
Hawthorne Boulevard	Redondo Beach Boulevard	South of Rosecrans Avenue	N/S
Inglewood Avenue	Artesia Boulevard	South of Rosecrans Avenue	N
	Marine Avenue	South of 147th Street	S
Prairie Avenue	Redondo Beach Boulevard	Rosecrans Boulevard	S
Rosecrans Avenue	East of Inglewood Avenue	Prairie Avenue	E/W
Marine Avenue	I-405	Prairie Avenue	W
	Inglewood Avenue	Prairie Avenue	E
Manhattan Beach Boulevard	Inglewood Avenue	Prairie Avenue	E/W
Artesia Boulevard	Inglewood Avenue	Redondo Beach Boulevard	W
Redondo Beach Boulevard	Artesia Boulevard	Prairie Avenue	W
I-405	North of Manhattan Beach Boulevard	Redondo Beach Boulevard	N/S
Source: De Novo Planning, *City of Lawndale General Plan Existing Conditions Report*, 2023.			

Additional goods movement through the City is supported by the Burlington Northern Santa Fe (BNSF) Railroad. Currently, a freight rail runs through the City of Lawndale along the Harbor Subdivision line, crossing into Lawndale at Inglewood Avenue north of Manhattan Beach Boulevard and running south parallel to Condon Boulevard to the City limits. This route is currently being considered as a future alignment for the extension of LA Metro's C Line (Green Line) light rail.

EXISTING VEHICLE MILES TRAVELED

Table 5.17-4, *Existing Conditions (2023) VMT*, shows the existing VMT levels in Lawndale and the existing Los Angeles Countywide average VMT per capita and VMT per employee. Two types of VMT were determined:

- VMT per Capita: This calculation represents the VMT for all home-based trips that originate within an area, divided by the area's resident population.
- VMT per Employee: This calculation represents the VMT for all work-based trips that originate or end within an area, divided by that area's employee population.

As shown in Table 5.17-4, the City's existing VMT per capita is approximately 23 percent below the County average and the City's existing VMT per employee is approximately 10 percent below the County average.

Table 5.17-4
Existing Conditions (2023) VMT

Units	Los Angeles County 2023 Existing Conditions	Lawndale 2023 Existing Conditions
VMT per Capita	12.81	9.87
VMT per Employee	18.13	16.26
Source: Source: *Lawndale General Plan CEQA Transportation Analysis*, prepared by Kittelson & Associates, Inc., dated July 12, 2023.		

5.17.3 REGULATORY SETTING

FEDERAL

Americans With Disabilities Act

The Americans with Disabilities Act of 1990 (ADA) provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to assure equality of opportunity, full participation, independent living, and economic self-sufficiency. To implement this goal, the United States Access Board has created accessibility guidelines for public rights-of-way. The guidelines address various issues, including roadway design practices, slope and terrain issues, pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way.

The City of Lawndale is committed to ensure that people with disabilities have access to City programs, services, activities, and facilities. In all of its services, programs, events, activities, facilities, and public meetings, the City strives to eliminate any barriers that prohibit people with disabilities from full access to facilities.

Federal Highway Administration

The Federal Highway Administration (FHWA) is a Federal agency that focuses on national highway programs. FHWA administers and manages Federal highway programs and establishes national standards. The FHWA publishes the Manual on Uniform Traffic Control Devices (MUTCD) which specifies the standards for street markings, traffic signals, and street signs in the United States. The California Department of Transportation (Caltrans) developed the 2014 California MUTCD (Rev. 6) based on the FHWA MUTCD.

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) is the primary State agency responsible for transportation oversight. One of its duties is the construction and maintenance of the State highway system. Caltrans has established standards for roadway traffic flow and developed procedures to determine if State-controlled facilities require improvements. For projects that may physically affect facilities or require access to a state highway, Caltrans requires encroachment permits before such activity

may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and levels of services at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects.

Additionally, the following Caltrans procedures and directives are relevant to transportation improvements in the City:

- Caltrans recently updated its transportation analysis guidelines to reflect a statewide shift from LOS to VMT. Caltrans has provided guidance in three recent publications: Vehicle Miles Traveled-Focused Transportation Impact Study Guide (May 2020), Transportation Analysis Under CEQA: Evaluating Transportation Impacts of State Highway System Projects (September 2020), and Transportation Analysis Framework: Evaluating Transportation Impacts of State Highway System Projects (September 2020).
- Traffic Safety Bulletin 20-02-R1 (Interim Local Development Intergovernmental Review Safety Review Practitioners Guide) provides instructions to Caltrans staff, lead agencies, developers, and consultants conducting safety reviews for proposed land use projects and plans affecting the state highway system. This guidance establishes the safety impact review expectations for Caltrans and lead agencies to comply with CEQA. This guidance is part of the shift away from using LOS or other similar metrics to assess transportation impacts.
- The Caltrans Project Development Procedures Manual outlines pertinent statutory requirements, planning policies, and implementing procedures regarding transportation facilities. It is continually and incrementally updated to reflect changes in policy and procedures. For example, the most recent revision incorporates the Complete Streets policy from Deputy Directive 64-R1, which is detailed below.
    - Caltrans Deputy Directive 64 (2001) requires Caltrans to consider the needs of non-motorized travelers, including pedestrians, bicyclists, and persons with disabilities, in all programming, planning, maintenance, construction, operations, and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices.
    - Caltrans Deputy Directive 64-R1 (2014) requires Caltrans to provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and products on the state highway system. Caltrans supports bicycle, pedestrian, and transit travel with a focus on "complete streets" that begins early in system planning and continues through project construction and maintenance and operations.
- Caltrans Director's Policy 22 (2001) establishes support for balancing transportation needs with community goals. Caltrans seeks to involve and integrate community goals in the planning, design, construction, and maintenance and operations processes, including accommodating the needs of bicyclists and pedestrians.
- Caltrans, as a responsible agency under CEQA, is available for early consultation on a project to provide guidance on applicable transportation analysis methodologies or other transportation

related issues and is responsible for reviewing the traffic impact study for errors and omissions pertaining to the state highway facilities.

Assembly Bill 32, Senate Bill 32, and Senate Bill 375

Assembly Bill (AB) 32, also known as the Global Warming Solutions Act of 2006, committed California to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. In 2016, Senate Bill (SB) 32 added a new target: reducing statewide emissions to 40 percent below 1990 levels by 2030.

The California Air Resources Board (CARB) adopted its first *Climate Change Scoping Plan* (Scoping Plan) in 2008, which functions as a roadmap of CARB's plans to achieve GHG reductions in California required by Assembly Bill (AB) 32 through subsequently enacted regulations. Updates to the Scoping Plan occurred in 2013, 2017, and 2022. The 2022 Scoping Plan Update was adopted by the CARB on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

SB 375 provides guidance for curbing emissions from cars and light trucks to help California comply with AB 32. There are five major components to SB 375:

- CARB will guide the adoption of GHG emission targets to be met by each Metropolitan Planning Organization (MPO) in the State.
- MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting these regional targets. The SCS must be consistent with the Regional Transportation Plan (RTP).
- Regional housing elements and transportation plans must be synchronized on eight-year schedules. Also, the SCS and Regional Housing Needs Assessment (RHNA) must be consistent with each other.
- CEQA is streamlined for preferred development types such as mixed-use projects and transit-oriented developments (TODs) if they meet specific requirements.
- MPOs must use transportation and air emission modeling methodologies consistent with California Transportation Commission (CTC) guidelines.

California Complete Streets Act of 2008 (AB 1358)

Passed in 2008, California's Complete Streets Act took effect in 2011 and requires local jurisdictions to plan for land use transportation policies that reflect a "complete streets" approach to mobility. "Complete streets" comprises a suite of policies and street design guidelines which provide for the needs of all road users, including pedestrians, bicyclists, transit operators and riders, children, the elderly, and persons with disabilities. From 2011 onward, any local jurisdiction—county or city—that undertakes a substantive update of the circulation element of its general plan must consider "complete streets" and incorporate corresponding policies and programs. In 2010, the California Governor's Office of Planning and Research (OPR) released guidelines for compliance with this legislation which provide direction on how circulation elements can best plan for a variety of travel modes such as transit, walking, bicycling, and freight.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. SB 743 has fundamentally changed transportation impact analysis as part of CEQA compliance. In its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), OPR provides recommendations for jurisdictions to implement SB 743-compliant transportation analyses. OPR's recommendations are not binding and lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence. Key guidance includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a "per rate" basis. Specifically, OPR recommends VMT per capita for residential projects and VMT per employee for office projects.
- OPR's recommended impact threshold for residential and office projects is VMT per capita fifteen percent below the city or regional average (whichever is applied). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. This threshold is in line with statewide greenhouse gas emission reduction targets.
- For retail projects, OPR recommends measuring the net decrease or increase in VMT in the study area with and without the project. The recommended impact threshold is any increase in total VMT.
- Lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.
- Cities and counties still can use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for CEQA impacts.

For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed under SB 743. It states that in general transportation impacts are best measured by evaluating the project's vehicle miles traveled. For land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact.

The City of Lawndale has not adopted VMT criteria to evaluate transportation impacts under CEQA. For the purpose of this analysis, the Governor's Office Planning and Research (OPR) technical advisory is being used for the traffic impact analysis guidelines. The technical advisory serves as a tool for the City to evaluate the effects a development will have on the City's transportation infrastructure, identify improvements required to maintain the Level of Service (LOS) standards and address Section XV (Transportation/Traffic) of Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Assembly Bill 417

In October 2013, AB 417 created a statutory CEQA exemption for bicycle plans in urbanized areas. Before the passage of this bill, cities and counties that prepared bicycle plans were required to carry out a CEQA review. AB 417 exempts the following types of bicycle projects in an urbanized area:

- Restriping of streets and highways;
- Bicycle parking and storage;
- Signal timing to improve intersection operations; and
- Signage for bicycles, pedestrians, and vehicles.

However, not all bicycle plans are exempt if certain conditions are met (e.g., a new Class I bicycle trail through a sensitive natural area).

LOCAL

Southern California Association of Governments

Southern California Association of Governments (SCAG) is a federally designated MPO and is made up of six counties and 191 cities. SCAG develops long-range regional transportation plans including sustainable communities' strategies and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and a portion of the South Coast Air Quality Management Plans.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which is an update of the previous 2016 RTP/SCS. The plan is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments in the region through 2045, and charts a path toward a more mobile, sustainable, and prosperous region. The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level. Although the focus of the 2020 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2020 RTP/SCS policies and strategies would also have co-benefits of reducing per capita criteria air pollutant and TAC emissions associated with reduced per capita VMT. Improved air quality with implementation of the 2020 RTP/SCS policies would decrease reactive organic gases (ROG) (i.e., VOCs), CO, NOx, and $PM_{2.5}$.

SCAG's 2020 RTP/SCS builds on the land use policies that were incorporated into the 2016 RTP/SCS, and provides specific strategies for successful implementation. These strategies include implementing the Sustainable Communities Program (SCP) – Housing and Sustainable Development (HSD) which will both accelerate housing production as well as enable implementation of the Sustainable Communities Strategy of Connect SoCal; encouraging use of active transportation, or human powered transportation such as bicycles, tricycles, wheelchairs, electric wheelchairs/scooters, skates, and skateboards; and supporting alternative fueled vehicles. The 2020 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in infill areas well served by transit.

In addition, the 2020 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2020 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2020 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for Federal and state funding, and to expand the potential for all people to use active transportation.

SCAG also develops and maintains the regional travel demand model. Several local and county agencies have developed subregional travel demand models based on the SCAG model.

Los Angeles County Metropolitan Transportation Authority

The Los Angeles County Metropolitan Transportation Agency (Metro) coordinates transportation planning efforts throughout Los Angeles County and programs local, regional, State and Federal funding for project implementation. Additionally, it prepares the Congestion Management Program (CMP), a plan mandated by California law to describe the strategies to address congestion problems on the CMP network, which includes State highways and principal arterials. The CMP Guidelines require analysis of the Metropolitan Transportation System (MTS) roadway and transit system and uses level of service standards to measure congestion and to determine how local governments meet CMP standards.

The 2020 Long Range Transportation Plan (LRTP) provides a detailed roadmap for how Metro will plan, build, operate, maintain, and partner for improved mobility in the next 30 years. The LRTP guides future funding plans and policies needed to move LA County forward for a more mobile, resilient, accessible and sustainable future. The adopted 2020 plan lays out a strategy for meeting transportation needs for all users in LA County and includes projects and other improvements for new and existing freeways, local streets, and public transit (paratransit, buses, rails, ferries), as well as facilities and programs to support bicycling and walking.

Metro has several countywide planning efforts that outline regional networks and provide guidance on best practices. These plans include the Countywide Multimodal Arterial Plan, the Countywide Goods Movement Plan, the Countywide Transit Plan, the Active Transportation Strategic Plan, and the First Last Mile Strategic Plan.

South Bay Bicycle Master Plan

The 2011 South Bay Bicycle Master Plan, prepared for the Los Angeles County Bicycle Coalition and the South Bay Bicycle Coalition, aims to develop and maintain a cohesive and connected bicycle network and policy strategy for the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance. The plan proposes the installation of 213 additional miles of bike facilities, including over 20 miles of bicycle facilities within Lawndale. The plan generally recommends adding Class II bicycle lanes to the City's arterial streets and designating key collector and local streets as "bike-friendly streets."

South Bay Cities Council of Governments

The South Bay Cities Council of Governments (SBCCOG) is a joint powers authority government agency of 16 cities and Los Angeles County. SBCCOG developed the Local Travel Network (LTN) to support the growing local use of "micromobility" and the use of zero-emission, slow speed vehicles. Such devices include neighborhood electric vehicles (NEVs)—which appear similar to golf carts, e-bikes, non-motorized pedal bikes, e-scooters, e-bikes and other "novelty" zero-emission, slow speed mobility devices such as one-wheels (electric skateboards).

In May 2021, the SBCCOG board passed a resolution that directed the SBCCOG to begin implementation of the Local Travel Network in the South Bay. The scope of creating a 243-mile LTN necessitated it be implemented in phases. The initial phase was separated into two corridor projects:

- Phase 1: El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach
- Phase 2: Hawthorne, Lawndale, Gardena, Inglewood, Carson, Lomita, Torrance, areas of unincorporated Los Angeles County as well as the communities of Wilmington, Harbor City, and San Pedro.

Lawndale Municipal Code

Municipal Code Chapter 10.50, *Truck Routes*, establishes designated truck routes for the primary use of commercial truck traffic through the City of Lawndale, specifically designated for use by licensed vehicles exceeding ten-thousand-pound gross weight.

Section 17.36.220, *Temporary Storage of Construction Materials*, and Section 17.36.230, *Temporary Storage- City Construction Materials and Other Public Agency Construction Materials*, regulate construction materials and equipment. In particular, Section 17.36.220 requires construction activities to keep adjacent sidewalks, public streets, and, alleys, to be kept free of trash, dirt, debris, or other material for the duration of the construction, as well as sixty days following substantial completion of such construction. Section 17.36.230 allows property in any zone to be used for the storage of materials, equipment and/or for a contractor's temporary office for any city construction project and/or other public agency construction projects.

Lawndale Parkway Design Policy Guidelines

First developed in 2018 and updated in July 2020, the Lawndale Parkway Design Policy Guidelines outlines specific guidelines and standards for parkways in the City. Parkways are defined as a portion of the public right-of-way that includes the strip of land between the street and the walkway. In Lawndale, property owners adjacent to the parkway are responsible for maintaining the area, except for street trees that are maintained by the City.

5.17.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to transportation. A significant transportation impact would occur if the Project would:

- Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (refer to Impact Statement TR-1);
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (refer to Impact Statement TR-2);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact Statement TR-3); and/or
- Result in inadequate emergency access (refer to Impact Statement TR-4).

VEHICLE MILES TRAVELED THRESHOLDS

As previously discussed, the City has not adopted VMT thresholds and has not published guidelines for the preparation of transportation studies. Under CEQA, lead agencies have the discretion to choose the most appropriate methodology to evaluate VMT and have discretion to choose their own significance thresholds. The Governor's Office of Planning and Research (OPR) provided a Technical Advisory containing guidelines related to VMT analysis methodology, thresholds, and mitigation. In Metropolitan Planning Organization (MPO) counties, OPR recommends that the significance threshold for residential and office projects be based on comparisons of VMT/capita and VMT/employee generated by the project to regional and city-wide average values. Lead agencies are encouraged in Section 15064.7 of the CEQA Guidelines to adopt significance thresholds through a formal adoption process but may also apply thresholds on a case-by-case basis. Since the City has not officially adopted VMT thresholds and guidelines for the preparation of transportation studies, this analysis relies on guidance from the OPR technical advisory to evaluate CEQA guidelines for VMT.

OPR recommended thresholds for residential and office land uses as follows:

- Residential: A project exceeding a level of 15% below existing VMT per capita for the city or region may indicate a significant transportation impact.
- Office: A project exceeding a level of 15% below existing regional VMT per employee may indicate a significant transportation impact.

For typical land development projects, such as residential, office, and commercial spaces, the VMT comparison is normally relative to the existing year (e.g., 2023). Since the General Plan Update is anticipated to take multiple years to be implemented and developed, it is more appropriate to calculate the project-generated VMT under the long-term 2045 horizon year (which would be consistent with the anticipated implementation of the General Plan). Based on this approach, if the VMT per capita or VMT per employee is lower in the horizon year with the General Plan Update than the respective metrics under existing conditions, the General Plan Update would have a less than significant impact on VMT. In summary, the following VMT thresholds apply as project impacts:

- The General Plan Update's residential generated VMT under 2045 horizon year conditions would be compared to 15 percent below the baseline region-wide VMT/capita average to determine impact significance.

- The General Plan Update's office generated VMT under 2045 horizon year conditions would be compared to 15 percent below the baseline region-wide VMT/employee average to determine impact significance.

A cumulative impact consists of an impact which is created as a result of the combination of the Project with other projects causing related impacts. A plan/project has cumulatively considerable environmental effects (i.e., is significant) when the incremental effects of the plan/project are significant when viewed in connection with the effects of other projects, including probable future projects. According to OPR's Technical Advisory, a project that falls below an efficiency-based threshold (such as VMT per capita or VMT per employee) that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact. A significant cumulative impact may also occur if the project is not consistent with the RTP/SCS. In summary, a significant cumulative VMT impact would occur if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the RTP/SCS.

Travel Demand Model

Existing (2023) VMT and future VMT were estimated using the Southern California Association of Governments (SCAG) travel demand model. Calculations for the VMT for the Project were determined for the transportation analysis zones (TAZs) that most closely represent the study area including the City limits and Sphere of Influence.

The daily activity patterns in the travel model are based on a statistical analysis of a household travel survey, where a representative sample of households were asked to track all daily activities and trips by all members of their household. The travel model was calibrated to these surveyed travel patterns, and also validated by its ability to replicate counted traffic volumes, transit ridership, and total VMT from traffic count sources.

The version of the SCAG model that has been used for VMT analysis in most communities in the SCAG region has a base year of 2012 and a forecast year of 2040.

Modeled Scenarios

The following scenarios were reviewed and developed to provide VMT and roadway segment forecasts:

- **2023 Existing Conditions:** corresponds to an interpolation between the SCAG model 2012 base year and the 2045 forecast conditions.
- **2045 No Project:** corresponds to 2045 horizon year conditions under the existing (currently adopted) General Plan. It consists of the adopted general plan network and land uses, and assumes allowable land use buildout with current zoning. Outside of the Lawndale Planning Area, the forecasts use the 2040 SCAG RTP land use forecast.
- **2045 Project:** corresponds to 2045 conditions with maximum development potential with the General Plan Update, including the Hawthorne Boulevard Specific Plan. Outside of the Lawndale Planning Area, the forecasts use the 2040 SCAG RTP land use forecast.

5.17.5 IMPACTS AND MITIGATION MEASURES

TR-1: Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Impact Analysis:

CIRCULATION SYSTEM

No specific development projects are proposed as part of the Lawndale General Plan Update. The update will accommodate future growth in the City, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The General Plan Update Mobility Element does not propose any roadway changes or increases in roadway capacity.

The Mobility Element developed as part of the General Plan Update contain goals, policies, and actions that support access to and the performance of the circulation system. Specifically, proposed Mobility Element Goal M-1 promotes a safe circulation system for the Planning Area. Policy M-1.5 ensures that new developments in the City provide appropriate and feasible improvements to improve traffic flow and roadway operations. Policy M-1.7 encourages the development of traffic calming strategies to slow traffic and promote safety. Action M-1b directs the City to continue to update and implement projects in the City's Capital Improvement Plan to maintain the roadway network. As a result, implementation of the General Plan Update would not conflict with applicable plans, polices, or ordinances related to vehicle circulation, and its impact on the City's circulation system is considered less than significant.

BICYCLE AND PEDESTRIAN CIRCULATION

The proposed Mobility Element references and incorporates the South Bay Bicycle Master Plan and the SBCCOG Local Travel Network, which include bicycling and walking improvements, and facilities that will improve non-motorized accessibility and connectivity throughout the City. The proposed Mobility Element includes new planned bike facilities on several key roadways including but not limited to Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Rosecrans Avenue, Manhattan Beach Boulevard, and Artesia Boulevard. Implementation of the General Plan Update would also enhance the pedestrian experience by providing a more walkable and denser environment, especially in the HBSP area.

The Mobility Element developed as part of the General Plan Update contains goals, policies, and actions that support access to and the performance of bicycle and pedestrian facilities. Specifically, Mobility Element Policy M-3.1 requires the City to apply Complete Street principals, which are streets that are designed to provide safe travels for all modes of travel, to all transportation improvement projects. Policy M-6.4 directs the City to identify and eliminate gaps in sidewalks and bikeways to create a more complete active transportation network. Policy M-6.5 requires new developments in the City to provide bicycle and pedestrian facilities. Action M-6b directs the City to implement the South Bay Bicycle Master Plan during roadways projects as funding allows. The implementation of policies and actions contained in the General Plan Update would ensure that the Project would not conflict with a program plan, ordinance, or policy addressing bicycle facilities. Therefore, the Project's impact is considered less than significant.

PUBLIC TRANSIT SYSTEM

The City does not have defined measures of effectiveness for public transit service and circulation. The proposed General Plan Update would be expected to increase demand for travel via public transit given the proposed development and expected increase in residents and employees. This population and job growth within the City could increase the demand for public transit but also result in increased levels of vehicular traffic which could slow transit operations and impact transit reliability. The Mobility Element developed as part of the General Plan Update includes policies to support and enhance transit service. Specifically, Mobility Element Policy M-5.2 encourages the City to coordinate with local public transit provides to plan and improve local transit service and transit facilities. Policy M-5.3 requires that new developments construct transit facilities when appropriate. The implementation of policies and actions contained in the General Plan Update would ensure that the Project would not conflict with a program plan, ordinance, or policy addressing the public transit system. Therefore, the Project's impact is considered less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-4.4: **Pedestrian-Scale Amenities.** Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

MOBILITY ELEMENT

Goal M-1: **Local Circulation System.** A community served by a safe circulation system with adequate traffic flow on arterial roadways and minimized adverse traffic effects on residential neighborhoods.

Policy M-1.5: **Development-Related Traffic Impacts.** Impose conditions on new development to provide appropriate and feasible improvements to enhance and/or prevent the impediment to traffic flow, parking, ADA accessibility and roadway operations.

Policy M-1.7: **Traffic Calming on Local Streets.** Encourage traffic calming strategies, such as diverters, median islands, and speed humps, and incorporation of traffic calming design in

residential and school areas to slow traffic and promote safety, while not reducing parking supply.

Action M-1a: Periodically review and assess the vehicular level of service along City facilities to determine, what, if any, improvements are warranted to maintain a safe and efficient flow of traffic throughout the City of Lawndale. Based on a thorough review of facility operations and funding availability, improvements should be included in the City's Capital Improvement Plan and/or required as part of project approval through the development review process.

Action M-1b: Continue to update and implement projects in the City's Capital Improvement Plan to maintain and repair roadways; construct and improve roadways to build out the roadway network to ensure adequate levels of service.

Action M-1e: Monitor cut-through traffic on local streets, especially along residential areas and schools, and where appropriate evaluate the applicability of traffic calming tools and implement improvements as necessary.

Policy M-2.3: **Facility Connections.** Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to relate to those in neighboring jurisdictions.

Goal M-3: **Complete Streets.** A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: **Multimodal Connectivity.** Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: **Streetscape Improvements.** Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: **Safe Routes to School.** Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: **Transit Use.** Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: **Improve Local Public Transit Service.** Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: **Transit Facilities.** Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: **C (Green) Line Service.** Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: **C (Green) Line Stations.** Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Policy M-5.6: **Effects of New Technologies on Transit Use.** Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

ActionM-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Goal M-6: **Active Transportation.** A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

Policy M-6.1: **Bicycle Master Plan.** Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: **Local Travel Network.** Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: **Sidewalk and Bikeway Gaps.** Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: **Bicycle/Pedestrian Facilities at New Developments.** Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: **Effects of New Technologies on Active Transportation.** Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: **Active Transportation Trails.** Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: **Service Area Radius.** Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-4.4: **Transportation Options.** Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability.** Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

ECONOMIC DEVELOPMENT ELEMENT

Policy ED-4.2: **Streetscape Improvements.** Enhance aesthetics and "curb appeal" of the Hawthorne corridor with strategic investments such as landscaping, outdoor lighting, wayfinding, entry and building façade improvements, and other initiatives that increase its attractiveness for businesses and consumers.

Policy ED-4.3: **Accessibility.** Enhance City and regional connectivity by supporting multimodal transportation options along Hawthorne Boulevard and other major City thoroughfares.

Action ED-4c: Implement strategies and actions in the Mobility Element and the Hawthorne Specific Boulevard Plan that promote infrastructure improvements and land use policies that will enhance economic activity and accessibility.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

TR-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis: A significant Project VMT or cumulative VMT impact would occur:

- Project Threshold: if the Project's 2045 VMT per capita or VMT per employee exceeds 15 percent below the existing Los Angeles countywide average VMT per capita, or VMT per employee, respectively.
- Cumulative Threshold: if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the RTP/SCS.

Table 5.17-5, *VMT Generated by Land Uses*, summarizes the VMT results for the 2023 existing conditions, the applicable thresholds to evaluate potential project impacts, and the future two VMT scenarios.

Table 5.17-5
VMT Generated by Land Uses

Units	Los Angeles County 2023 Existing Conditions	Lawndale 2023 Existing Conditions	Lawndale 2045 Project
VMT per Capita	12.81	9.87	9.19
VMT per Employee	18.13	16.26	14.78
Source: Source: *Lawndale General Plan CEQA Transportation Analysis*, prepared by Kittelson & Associates, Inc., dated July 12, 2023.			

Future conditions with the Project would result in decreased VMT per employee and VMT per capita in comparison to existing conditions. The 2045 Project VMT per capita is approximately 28 percent less than the existing Los Angeles countywide average VMT per capita and the 2045 Project VMT per employee is approximately 18 percent less than the existing Los Angeles countywide average VMT per employee. Thus,

the proposed General Plan Update would not exceed 15 percent below the existing Los Angeles countywide average VMT per capita or VMT per employee and therefore would result in a less than significant Project VMT impact.

The reductions of VMT from 2023 Existing Conditions to 2045 Project Conditions indicate that future development under the General Plan Update, in particular the proposed mixed-use development within the Hawthorne Boulevard Specific Plan area, would provide more opportunities for Lawndale residents and employees to access jobs and services within shorter distances. The shorter trip distances reduce VMT by vehicles, and also increase the likelihood that trips would be made by non-auto modes such as bicycling and walking. Improved transit service and accessibility to transit also help to reduce VMT even as travel activity increases.

A significant cumulative VMT impact would occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the 2020 RTP/SCS. As detailed in this section, the Project VMT threshold is not exceeded. In addition, the Project is consistent with SCAG's 2020 RTP/SCS. Implementation of the proposed Project would increase the local and regional housing supply to meet regional housing needs and locate housing in a transit-rich area. Additionally, the Project helps further the goals of SCAG's 2020 RTP/SCS. An analysis of the proposed Project's consistency with the relevant SCAG 2020 RTP/SCS goals adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 5.8, *Greenhouse Gas Emissions*, Table 5.8-5, *Project Consistency with the 2020-2045 RTP/SCS*.

The Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG's 2020 RTP/SCS goals. Therefore, the Project's cumulative impacts related to VMT would be less than significant.

The Land Use and Mobility elements developed as part of the General Plan Update includes policies to support the reduction of VMT, including increasing the balanced mix of residential and employment opportunities within the City with the proposed land uses.

Overall, implementation of the Project would result in reductions in VMT per capita and VMT per employee compared to 2023 existing conditions; impact thresholds would not be exceeded. Therefore, with respect to consistency with CEQA Guidelines Section 15064.3, subdivision (b), the impact of the Project would be less than significant and no mitigation would be required.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Policy LU-1.2: **Balance Jobs and Housing.** Balance levels of employment and housing within the community to provide more opportunities for Lawndale residents to work locally, reduce commute times, and improve air quality.

Policy LU-2.2: **Focused Areas for New Development.** Encourage new development to be focused within the Hawthorne Boulevard Specific Plan area and within the City's Housing Opportunity Overlay sites to preserve the character of the community's existing single-family uses, promote active transportation options, and create vibrant mixed-use activity nodes.

Policy LU-4.4: **Pedestrian-Scale Amenities.** Support the installation of pedestrian-scale amenities throughout the City that contribute to a high-quality living environment, such as street furniture, fountains, pedestrian-scaled signs and lighting, murals or public art, landscaping, and sidewalk improvements.

MOBILITY ELEMENT

Goal M-3: **Complete Streets.** A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.2: **Multimodal Connectivity.** Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.

Policy M-3.3: **Streetscape Improvements.** Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.

Policy M-3.6: **Safe Routes to School.** Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Policy M-5.1: **Transit Use.** Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.

Policy M-5.2: **Improve Local Public Transit Service.** Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.

Policy M-5.3: **Transit Facilities.** Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.

Policy M-5.4: **C (Green) Line Service.** Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.

Policy M-5.5: **C (Green) Line Stations.** Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.

Action M-5a: Continue on-going coordination with transit authorities toward the expansion of transit facilities.

Action M-5b: Work with Metro to increase transit service frequency, speed, and reliability and increase ridership and to strengthen linkages and access to the C line rail stations.

Goal M-6: **Active Transportation.** A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

Policy M-6.1: **Bicycle Master Plan.** Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations as shown in Figure M-2.

Policy M-6.2: **Local Travel Network.** Coordinate with the South Bay Cities Council of Governments to promote local micromobility modes by implementing the Local Travel Network plan and supporting efforts to integrate the network with adjacent cities, as shown in Figure M-3.

Policy M-6.4: **Sidewalk and Bikeway Gaps.** Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.

Policy M-6.5: **Bicycle/Pedestrian Facilities at New Developments.** Require new residential and non-residential developments in the City to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

Policy M-6.6: **Effects of New Technologies on Active Transportation.** Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

Action M-6a: As part of development review and specific plans, review any existing gaps in active transportation infrastructure that inhibit mobility.

Action M-6b: Implement of the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaces, as funding allows.

Action M-6c: Review and update the City's Municipal Code, as necessary, to consider bicycle and pedestrian access as part of the site plan review for new development projects.

Policy M-9.1: **Vehicle Miles Traveled Guidelines.** Require vehicle miles traveled (VMT) analysis for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain Level of Service (LOS) standards for the purposes of planning and designing street improvements.

Policy M-9.2: **Transportation Demand Management.** Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.

Policy M-9.3: **Regional Coordination.** Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.

Policy M-9.4: **New Development.** Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Action M-9a: Review and update the City's Municipal Code and related implementation documents, as necessary, to reflect TDM best practices.

Action M-9b: Require developments that are approved based on TDM plans to incorporate monitoring and enforcement of TDM targets as part of those plans.

RESOURCE MANAGEMENT ELEMENT

Policy RM-1.9: **Active Transportation Trails.** Provide safe and accessible bicycle and pedestrian trails for the City's residents by improving and promoting the establishment of trails utilizing alleys, streets, sidewalks, railroad right-of-way, and other open space areas.

Policy RM-1.10: **Service Area Radius.** Focus new park facilities in areas that are outside a 1/2-mile walking radius from an existing or proposed park or bike trail, and enhance options for residents to access these facilities through safe walking, bicycling, and transit routes. Physical barriers such as I-405 should also be considered when evaluating service area and access.

Action RM-1g: Coordinate with LA Metro and associated entities regarding the multi-use trail and/or greenway proposed as part of Metro's C Line (Green) extension project. The City should be actively engaged in the design and implementation of the project to ensure the project reflects community preferences, is compatible with surrounding uses, and maximizes connectivity for active transportation.

Action RM-1h: Consider the creative use of space for the median along Hathorne Boulevard to expand available open space and opportunities for physical fitness, including but not limited to, greenways, parklets, bike or pedestrian paths, and a fitness trail.

Policy RM-4.4: **Transportation Options.** Promote alternative modes of transportation to reduce vehicular emissions and improve air quality. *(See Mobility Element)*

Policy RM-4.5: **Walkability.** Encourage pedestrian-scale development and pedestrian-friendly design features to reduce vehicle emissions. *(See Mobility Element)*

Policy RM-4.6: **Land Use Planning.** Encourage and incentivize higher density and mixed-use development opportunities within designated areas of the City to lessen the impacts of traffic congestion on local air quality. *(See Land Use Element)*

Action RM-4g: Evaluate and consider multi-modal transportation benefits to all City employees, such as free or low-cost monthly public transportation (bus) passes. Encourage employer participation in similar programs. Encourage new transit/shuttle services and use.

Action RM-4h: Establish programs that encourage community car-sharing and carpooling.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

TR-3: Would the project substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: A significant Project impact would occur if the Project substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

The Project does not propose changes to the Citywide roadway network and configuration. Geometric design features would generally be limited to individual projects' internal roadway networks, as well as driveways along City roads. Hazards are typically assessed at the individual project level when an actual design and construction of a circulation facility is proposed. Site-specific developments would be reviewed by the City to ensure adequate ingress and egress would be provided and site distance standards would be implemented. The City's design and construction standards and specifications provide for coordinated and standardized development of city facilities, including roadways. The standards apply to, regulate, and guide the design and preparation of plans, and the construction of streets, highways, alleys, drainage, traffic signals, site access, and related public improvements. As individual projects would undergo review by the City for approval and construction and would have to meet design guidelines, potential safety design hazards associated with land development projects would be addressed and result in less than significant impacts.

Prior to implementation, any improvements would be subject to a detailed review and future consideration by the City's Public Works engineering staff and other relevant City departments. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be needed at the project design level. Roadway improvements would have to be made in accordance with the City's roadway design guidelines and meet design guidelines in the California Manual of Uniform Traffic Control Devices and the Caltrans Roadway Design Manual.

The types of uses included as part of the General Plan Update are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Planning Area and in the surrounding area. In addition, the Mobility Element developed as part of the General Plan Update contains policies in support of roadway network safety and reducing design hazards. This includes proposed Mobility Element Policy M-3.5 and Action M-3e which promotes managing and improving the City's transportation network to be safe, accessible and consistent with ADA and to include ADA accessible features as part of roadway infrastructure projects. Proposed Mobility Element M-3.4 encourages roadway design to include traffic calming measures to maintain safe vehicular speeds. Proposed Land Use Element Policy LU-3.1 considers the compatibility of new development with surrounding uses when reviewing development proposals. The implementation of goals, policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would not substantially increase hazards due to geometric design features or incompatible uses. Therefore, the impact of the Project with respect to design and incompatible use hazards would be considered less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Policy LU-1.1: **Sustainable Land Use Pattern.** Provide an appropriate land use plan that promotes efficient development; fosters and enhances community livability and public health; sustains economic vitality; promotes efficient development and multiple transportation options; reduces pollution, greenhouse gas emissions, and the expenditure of energy and other resources; and ensures compatibility between uses consistent with the land use designations identified in this Element and Land Use Map (LU-1).

Goal LU-3: **Land Use Compatibility.** A community where new development is sensitively integrated with existing development, including residential neighborhoods, and minimizes impacts on surrounding land uses.

Policy LU-3.1: **Surrounding Uses.** Consider as part of the development review process the compatibility of new development with surrounding uses and the ability of new development to enhance the character of the surrounding area.

Policy LU-3.4: **Residential Uses.** Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses, and other features including transportation facilities.

Action LU-3b: Through the development review process, evaluate development proposals for land use and transportation network compatibility with existing surrounding or abutting development and neighborhoods.

MOBILITY ELEMENT

Goal M-3: **Complete Streets.** A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users

Policy M-3.1: **Complete Streets for Roadway Projects.** Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).

Policy M-3.4: **Traffic Calming on Residential Streets.** Encourage traffic calming strategies and incorporation of traffic calming design in residential areas to slow traffic and promote safety.

Policy M-3.5: **ADA Accessibility.** Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

Policy M-3.6: **Safe Routes to School.** Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

Action M-3a: When planning roadway facilities, incorporate the concept of complete streets. Complete streets include design elements for all modes that use streets, including autos, transit, pedestrians, and bicycles. Complete streets shall be developed in a context-sensitive manner. For example, it may be more appropriate to provide a Class I bike path instead of bike lanes along a major arterial.

Action M-3e: Include ADA-accessible facilities as part of roadway infrastructure projects.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

TR-4: Would the project result in inadequate emergency access?

Impact Analysis: A significant project impact would occur if it results in inadequate emergency access. It is noted that the Project does not propose site-specific development; emergency accessibility is typically assessed at the project level.

Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, *Temporary Storage of Construction Materials*, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion

of such construction. Additionally, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building permit. LACoFD would review the proposed development for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. The proposed development would be required to comply with all applicable Building and Fire Code requirements and would submit construction plans to the Fire Department's Engineering Building Plan Check Unit for review and approval prior to issuance of any building permit. Approval by the Fire Department would ensure that construction and operation of future projects associated with implementation of the General Plan Update would not result in inadequate emergency access. In addition, the Public Safety and Mobility Elements developed as part of the General Plan Update contains policies in support of emergency access along local roads.

The proposed Mobility Element Goal M-3 promotes striving to maintain sufficient access and mobility for all modes of travel and users of the roadway network. The proposed Public Safety Element Policy PS-1.6 encourages improvements to emergency access and circulation throughout the community. Policy PS-4.3 requires all new developments to provide adequate access for emergency vehicles and evacuation as part of the development review process. The implementation of goals, policies and actions contained in the General Plan Update and compliance with the Lawndale Municipal Code would ensure that new development in the Planning Area would not result in inadequate emergency access. Therefore, the impact of the General Plan Update with respect to emergency access would be considered less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

MOBILITY ELEMENT

Policy M-2.1: **Freeway Interchanges.** Coordinate with Caltrans to develop appropriate configurations and operations at Interstate 405 interchange intersections to minimize congestion on City streets and create safe conditions.

Policy M-2.2: **Agency Coordination**: Coordinate with neighboring cities, telecom companies, and regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.

Goal M-3: **Complete Streets.** A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users.

Policy M-3.5: **ADA Accessibility.** Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

Action M-3e: Include ADA-accessible facilities as part of roadway infrastructure projects.

PUBLIC SAFETY ELEMENT

Policy PS-1.6: **Emergency Access.** Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Policy PS-4.3: **Emergency Access.** Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.17.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, establishes growth and development within Los Angeles County as anticipated by SCAG as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur. The cumulative projects' setting for transportation considers the region and projects within the City.

Would the project, combined with other related cumulative projects, conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Analysis: A significantly cumulative impact would occur if the Project and cumulative projects conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Overall, the Project is a programmatic land use plan and is not proposing any changes to the circulation system. Any future development within the City would be assessed for consistency with local policies and ordinances, including the Municipal Code and General Plan goals and policies, as appropriate. Therefore, the Project's incremental contribution to cumulative impacts related to transit, roadway, bicycle, and pedestrian facilities would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Impact Analysis: As described above, with implementation of the General Plan Update under the City's cumulative buildout conditions, the 2045 Project VMT per capita is approximately 28 percent less than the existing Los Angeles countywide average VMT per capita and the 2045 Project VMT per employee is approximately 18 percent less than the existing Los Angeles countywide average VMT per employee. With implementation of the Project, the City's VMT per capita would not exceed 15 percent below the Los Angeles countywide average. Implementation of the Project would therefore not result in a cumulatively considerable impact relative to VMT.

A significant cumulative VMT impact would occur if the Project threshold is exceeded or if the Project is determined to be inconsistent with the 2020 RTP/SCS. As discussed, the Project would be consistent with the SCAG's 2020 RTP/SCS and would contribute toward furthering the goals of SCAG's 2020 RTP/SCS.

As the Project does not exceed the Project VMT threshold and is consistent with the relevant SCAG's 2020 RTP-SCS goals, the proposed Project's incremental contribution to cumulative VMT impacts would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis: As described above, the types of uses that would be allowed as part of Project implementation are generally similar to existing and surrounding uses and thereby are compatible with the existing uses in the Planning Area and in the surrounding area. Additionally, site-specific developments would be reviewed by the City to ensure adequate ingress and egress would be provided and site distance standards would be implemented. Implementation of the Project would therefore not contribute to a cumulatively considerable impact relative to an increase in hazards due to a geometric design feature.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, result in inadequate emergency access?

Impact Analysis: A cumulatively significant project impact would occur if implementation of the Project with cumulative projects would result in inadequate emergency access. As noted, the Project does not propose site-specific development; emergency accessibility is typically assessed at the project level.

The Project does not propose changes to the citywide roadway network and configuration that would affect local emergency access. The proposed Project along with the cumulative development projects could result in the temporary closure or control of traffic lanes located immediately adjacent to a development site during construction activities. Any temporary closure would be required to comply with the Lawndale Municipal Code.

Similarly, the applicant of any proposed development would be required to submit appropriate plans for plan review to ensure compliance with zoning, building, and fire codes prior to the issuance of a building

permit. LACoFD would review all development projects for access requirements, minimum driveway widths, fire apparatus access roads, fire lanes, signage, access devices and gates, access walkways, among other requirements to ensure adequate emergency access would be provided to and within the site. Therefore, the proposed Project's incremental contribution to cumulative impacts relative to emergency access would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

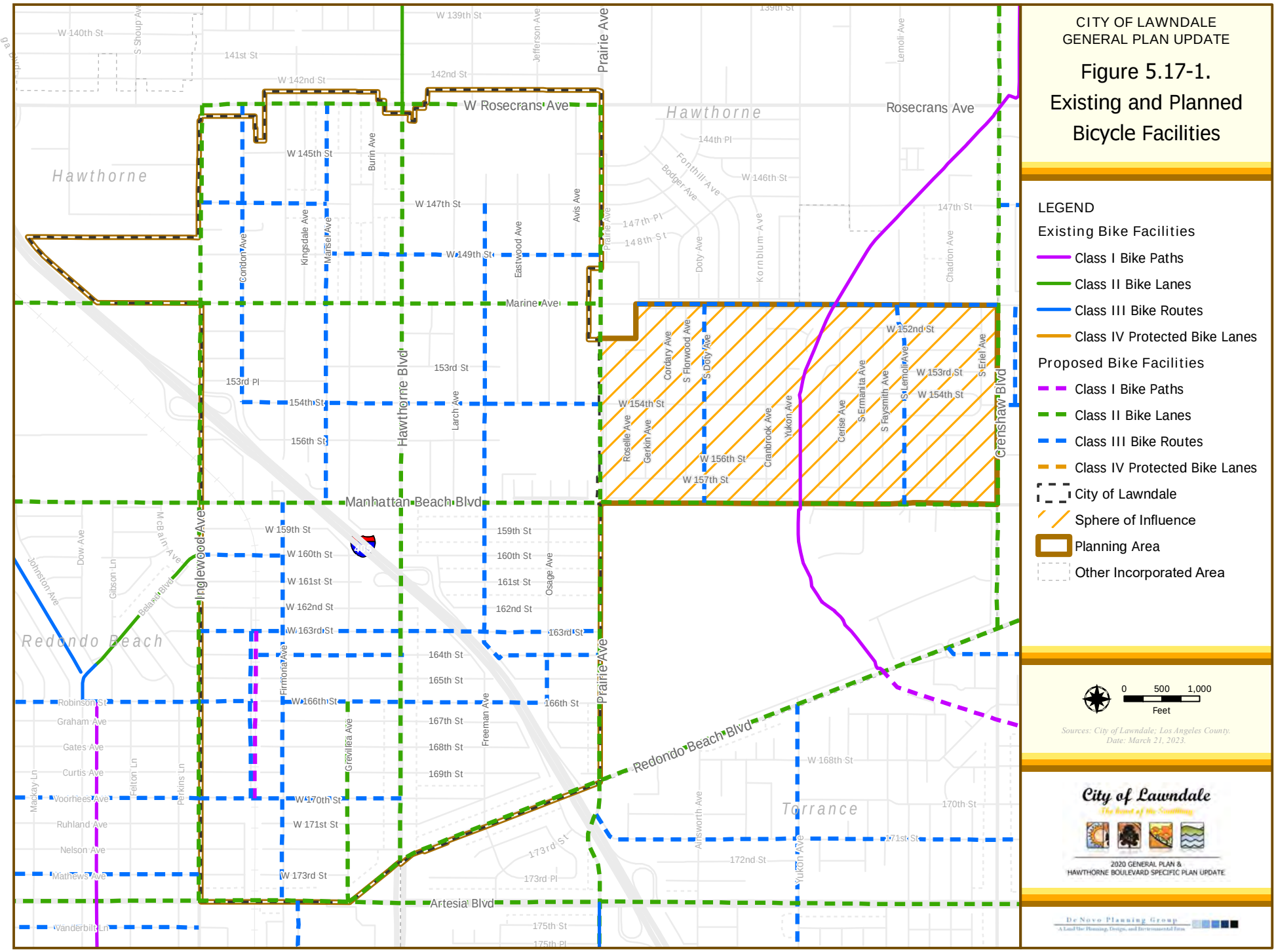
5.17.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Transportation impacts associated with implementation of the General Plan Update would be less than significant. No significant unavoidable transportation impacts would occur as a result of the General Plan Update

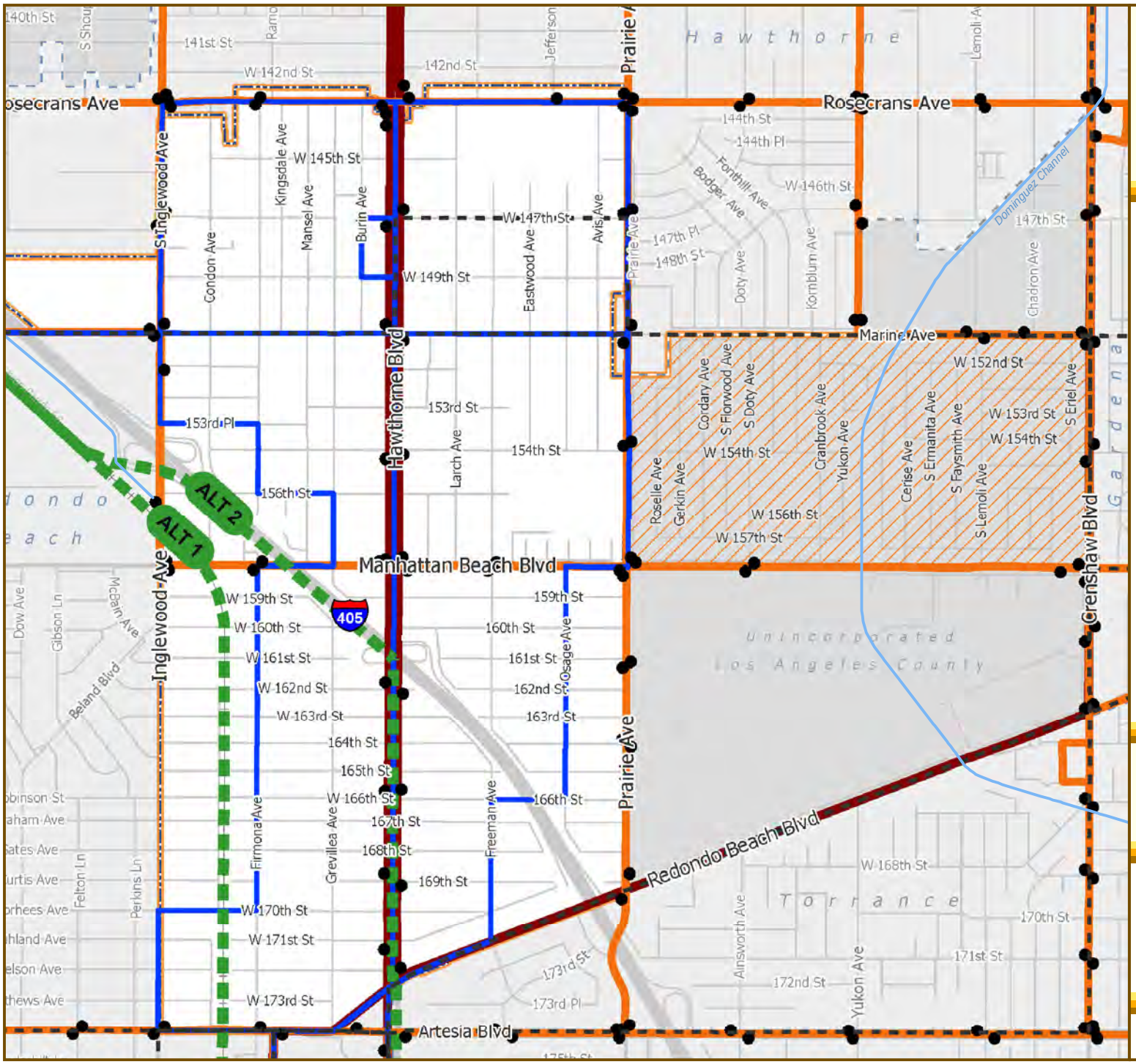
5.17.8 REFERENCES

Kittelson & Associates, Inc., *Lawndale General Plan CEQA Transportation Analysis*, July 12, 2023.

This page intentionally left blank.


CITY OF LAWNDALE
GENERAL PLAN UPDATE
Figure 5.17-1.
Existing and Planned
Bicycle Facilities
LEGEND
Existing Bike Facilities
Class I Bike Paths
Class II Bike Lanes
Class III Bike Routes
Class IV Protected Bike Lanes
Proposed Bike Facilities
Class I Bike Paths
Class II Bike Lanes
Class III Bike Routes
Class IV Protected Bike Lanes
City of Lawndale
Sphere of Influence
Planning Area
Other Incorporated Area
0 500 1,000
Feet
Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.
City of Lawndale
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE
De Novo Planning Group
Hawthorne
Rosecrans Ave
W Rosecrans Ave
Prairie Ave
Hawthorne Blvd
Crenshaw Blvd
Marine Ave
Manhattan Beach Blvd
Inglewood Ave
Redondo Beach Blvd
Artesia Blvd
Redondo Beach
Torrance
W 140th St
141st St
W 142nd St
142nd St
W 139th St
139th St
W 145th St
W 146th St
W 147th St
147th St
W 149th St
153rd St
153rd Pl
154th St
156th St
W 154th St
W 156th St
W 157th St
W 152nd St
W 153rd St
W 159th St
W 160th St
W 161st St
W 162nd St
W 163rd St
163rd St
159th St
160th St
161st St
162nd St
164th St
165th St
W 166th St
166th St
167th St
168th St
169th St
W 170th St
W 171st St
W 173rd St
173rd St
173rd Pl
175th St
175th Pl
W 168th St
170th St
171st St
172nd St
Robinson St
Graham Ave
Gates Ave
Curtis Ave
Voorhees Ave
Ruhland Ave
Nelson Ave
Mathews Ave
Vanderbilt Ln
Johnston Ave
Dow Ave
Gibson Ln
McBain Ave
Belaire Blvd
Mackay Ln
Felton Ln
Perkins Ln
Condon Ave
Kingsdale Ave
Manse Ave
Burin Ave
Eastwood Ave
Avis Ave
Larch Ave
Firmona Ave
Grevillea Ave
Freeman Ave
Osage Ave
Jefferson Ave
S Shoup Ave
Lemoli Ave
Fonthill Ave
Bodger Ave
144th Pl
147th Pl
148th St
Doty Ave
Kornblum Ave
Chadron Ave
Cordary Ave
S Florwood Ave
S Doty Ave
Roselle Ave
Gerkin Ave
Cranbrook Ave
Yukon Ave
Cerise Ave
S Ermanita Ave
S Faysmith Ave
S Lemoli Ave
S Eriel Ave
Ainsworth Ave
Yukon Ave

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.17-2. Existing and Planned Transit Routes

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Unincoporated Los Angeles County
- LA Metro Bus Stop Location
- LA Metro Local or Limited Line
- LA Metro Rapid Line
- LA Metro C Line (Green Line)
- LA Metro C Line (Green Line) Proposed Extension Alternative
- Lawndale Beat Route
- GTrans and Torrance Local Routes

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; Kittelson & Assoc.
Date: June 27, 2023.

City of Lawndale
The heart of the Southbay

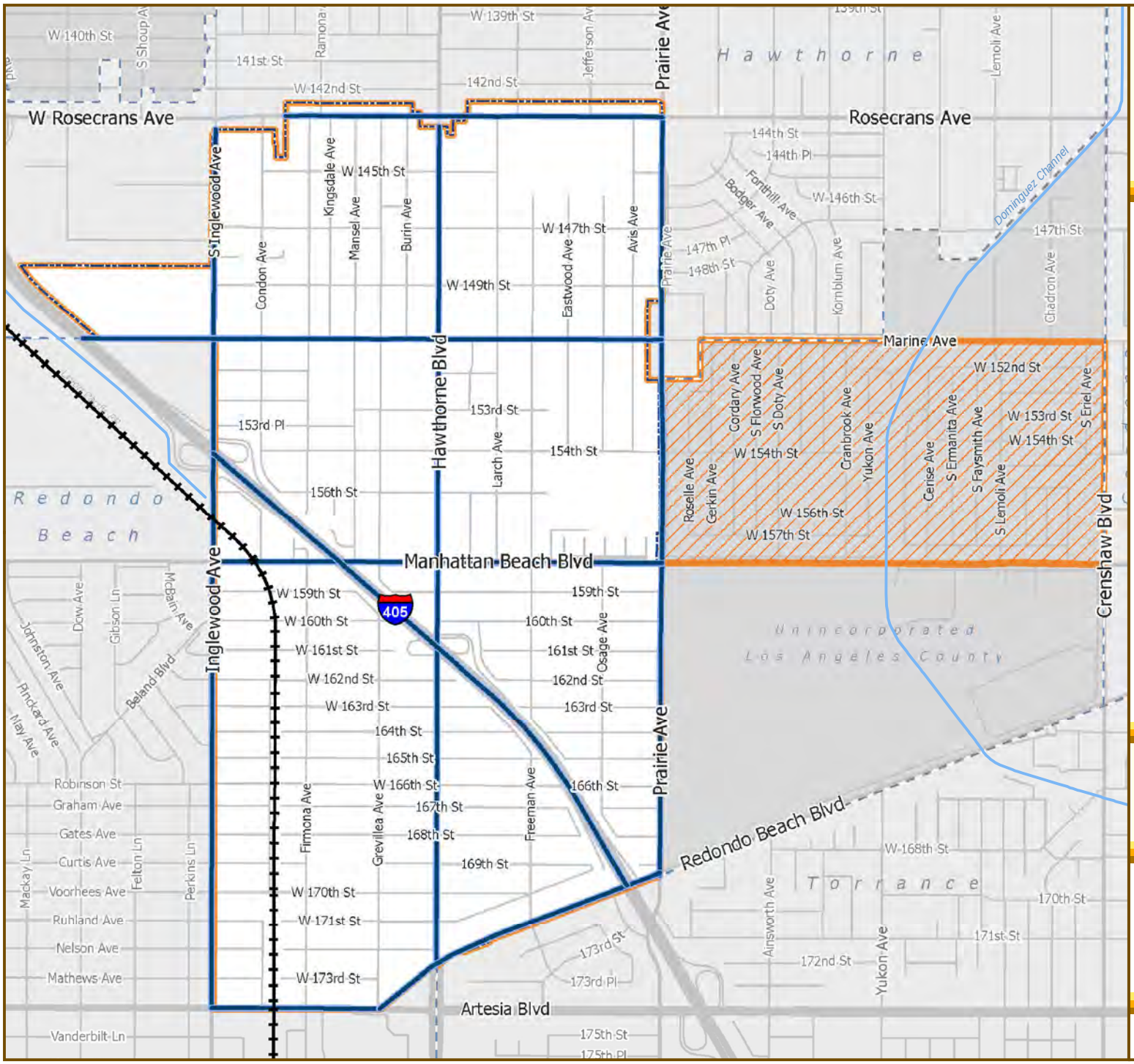
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.17-3. Existing Truck Routes



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Unincorporated Los Angeles County
- Existing Truck Routes
- Existing Freight Rail System

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; Kittelson & Assoc.
Date: June 27, 2023.

City of Lawndale
The Heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.18 TRIBAL CULTURAL RESOURCES

5.18.1 PURPOSE

This section identifies existing tribal cultural resources within the Planning Area, and provides an analysis of potential impacts associated with implementation of the General Plan Update.

This section is primarily based upon the Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County (Cultural Study), prepared by Duke Cultural Resources Management, LLC and dated October 2020 and updated July 2023; refer to Appendix D, *Cultural and Paleontological Resources Assessment*.

One comment was received during the NOP comment period regarding tribal cultural resources. The comment was received from the Native American Heritage Commission (NAHC). The NAHC provides recommendations for cultural resources assessments and recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

Cultural resources, specifically historic and archeological resources, are discussed in Section 5.5, *Cultural Resources*.

5.18.2 ENVIRONMENTAL SETTING

ETHNOGRAPHIC OVERVIEW

The Planning Area is located within the boundaries of Gabrielino or Tongva Indians. The Gabrielino Indians are named because of their association with the Mission San Gabriel Arcángel. The Gabrielino are one of the least known Native American groups in California. Generally, their territory included all of the Los Angeles Basin, parts of the Santa Ana and Santa Monica Mountains, along the coast from Aliso Creek in the south to Topanga Canyon in the north, and San Clemente, San Nicolas, and Santa Catalina Islands.

The Gabrielino spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrielino shared this language with their neighboring groups to the south and east.

Groups of Gabrielino lived in villages that were autonomous from other villages. Each village had access to hunting, collecting, and fishing areas. Villages were typically located in protected coves or canyons near water. Acorns were the most important food for the Gabrielino, although the types and quantity of different foods varied by season and locale. Other important sources of food were grass and many other seed types, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals.

Typically, Gabrielino women gathered and men hunted, although work tasks often overlapped. Each village had a chief who controlled religious, economic, and warfare authorities. The chief had an assistant and an advisory council who assisted in important decisions and rituals. Each of these positions was

hereditary being passed down from generation to generation. According to mapping of Gabrielino villages undertaken by McCawley, no known villages would be located within the City of Lawndale. The two nearest Gabrielino villages, which may compose large areas rather than just a single location, are Swaanga, approximately 10 miles to the southeast, and Waachnga, approximately five miles to the northwest. The Kirkman-Harriman Pictorial and Historical Map of Los Angeles also does not identify any Gabrielino villages within the City.

TRIBAL CULTURAL RESOURCES

As discussed in Section 5.5, *Cultural Resources*, a search of the California Historic Resources Inventory System (CHRIS) at the South Central Coastal Information Center (SSCIC) located at the California State University, Fullerton was conducted on June 9, 2020. The records search covered the entire City of Lawndale. In addition, a variety of other sources were consulted and a reconnaissance field survey was conducted in order to gather baseline data on the present state of previously recorded cultural resources within the Planning Area.

Results of the SSCIC records search did not indicate the presence of recorded tribal cultural resources within the Planning Area; refer to Table 5.5-1.

NATIVE AMERICAN CONSULTATION

The City conducted Native American consultations under Senate Bill (SB) 18 (Chapter 905, Statutes of 2004), which requires local governments to consult with Tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. In addition to SB 18 consultation, the City conducted tribal consultations under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as Assembly Bill (AB) 52, which requires consulting for projects within the City's jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB 52 consultations with the City.

As part of the General Plan Update, a Tribal Consultation List Request was submitted to the NAHC. The NAHC responded on May 17, 2021 and included a list of Native American individuals or tribal organizations that may have knowledge of cultural resources within or near the Project site. On July 14, 2021, the City sent letters via certified mail to five Native American individuals and/or Tribal Organizations in compliance with AB 52 and SB 18; refer to Appendix H, *Tribal Consultation Communications*. No Tribal Organizations responded requesting formal consultation with the City.

5.18.3 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at Federal, State, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP),

established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

National Register of Historic Places

Developed in 1981 pursuant to Title 36 CFR Section 60, the NRHP provides an authoritative guide to be used by Federal, State and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. It should be noted that the listing of a private property on the NRHP does not prohibit any actions which may otherwise be taken by the property owner with respect to the property. The listing of sites in California to the National Register is initiated through an application submitted to the State Office of Historical Preservation. Applications deemed suitable for potential consideration are handled by the State Historic Preservation Officer. All NRHP listings for sites in California are also automatically added to the California Register of Historical Resources by the State of California. The listing of a site on the NRHP does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA (and NEPA, the National Environmental Protection Act) review to be satisfied prior to the approval of any discretionary action occurring that might adversely affect the resource.

American Indian Religious Freedom Act

This American Indian Religious Freedom Act became law in 1978 (Public Law 95-341, 42 USC 1996) in order to protect and preserve for American Indians their inherent right of freedom to believe, express and exercise their traditional religions. These religious rights extend to, but are not limited to, access to sites, use and possession of sacred objects and the freedom to worship through ceremonials and traditional rites.

Under this regulation, Federal agencies and departments are charged with evaluating their policies and procedures in consultation with native traditional religious leaders in order to eliminate interference with the free exercise of native religion. Agencies must determine and make appropriate changes necessary to protect and preserve Native American religious cultural rights and practices, and to accommodate access to and use of religious sites "to the extent that the use is practicable and not inconsistent with an agency's essential functions." The intent is to protect Native Americans' First Amendment right to "free exercise" of religion.

Native American Graves Protection and Repatriation Act

Enacted in 1990 under Title 25 U.S. Section 3001, the Native American Graves Protection and Repatriation Act (NAGPRA) describes the rights of Native American lineal descendants, Indian Tribes and Native Hawaiian organizations with respect to treatment, repatriation and disposition of Native American cultural items for which they can show a relationship of lineal descent or cultural affiliation. The statute also requires Federal agencies and museums receiving Federal funds to inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. In an attempt to recognize the religious and cultural significance of such sites and to protect their sacred integrity, it also provides for greater protection of Native American burial sites and more careful control

over the removal of Native American human remains, funerary objects, sacred objects and items of cultural patrimony on Federal and tribal lands.

STATE

California Environmental Quality Act

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR, a resource included in a local register of historical resources, or any object building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource is considered historically significant if it meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]). Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Register of Historical Resources (CRHR)

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated

for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria.

Public Resources Code Section 5097 (Related to Cultural Resources)

California Public Resources Code (PRC) Section 5097 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the California Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the CEQA Guidelines.

PRC Sections 5097.9 through 5097.991 establish that no public agency or private party using or occupying public property (or operating on under a public license, permit, grant, lease or contract made after July 1, 1977) shall in any manner interfere with the free expression or exercise of Native American religion as provided in the U.S. Constitution and the California Constitution. It also prohibits such agencies and parties from causing severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require it.

These sections also establish the state's NAHC. The NAHC is tasked with working to ensure the preservation and protection of Native American human remains, associated grave goods and cultural resources. Towards this end, the NAHC has a strategic plan for assisting the public, development communities, local and Federal agencies, educational institutions and California Native Americans to better understand problems relating to the protection and preservation of cultural resources and to serve as a tool to resolve these problems. In 2006, PRC Sections 5097.91 and 5097.98 were amended by Assembly Bill 2641 to authorize the NAHC to bring legal action when necessary to prevent damage to Native American burial grounds or places of worship. It also established more specific procedures to be implemented in the event that Native American remains are discovered.

California Government Code Sections 6254(r) and 6254.10

Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the SHRC, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native

American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

Native American Heritage Commission (NAHC)

The NAHC, created by statute in 1976 (AB 4239), is a nine-member body, appointed by the Governor to identify, catalog, and protect cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands (i.e., Sacred Lands File), and reviewing current administrative and statutory protections related to these sacred sites.

Senate Bill 18

Signed into law in 2004, Senate Bill (SB) 18 requires that cities and counties notify and consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural sites. Cities and counties must provide general and specific plan amendment proposals to California Native American Tribes that have been identified by the Native American Heritage Commission as having traditional lands located within the city's boundaries. If requested by the Native American Tribes, the city must also conduct consultations with the tribes prior to adopting or amending their general and specific plans.

Assembly Bill 52 (Gatto, 2014)

On September 25, 2014, Governor Brown signed AB 52. In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, of the stated goals of AB 52 are the following:

1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2) Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required

confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.

6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 establishes a tribal consultation procedure designed to incorporate tribal knowledge into the CEQA environmental review and decision-making processes. Under AB 52, California tribes have the ability to establish, through a formal notice letter, a standing request to consult with a lead agency regarding any proposed project subject to CEQA in the geographic area with which the tribe is traditionally and culturally affiliated. Within 14 days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency must provide formal notification to the designated contact or tribal representative of traditionally and culturally affiliated California Native American tribes that have requested notice. Notice to the tribes must include a brief project description, the project location, and the lead agency's contact information. A tribe then has 30 days to request consultation. If the tribe does not respond in that period or writes to decline consultation, the lead agency has no further obligation. If the tribe requests consultation, the lead agency must begin the consultation within 30 days and prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for that proposed project.

5.18.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to tribal cultural resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) (refer to Impact Statement TCR-1); or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe (refer to Impact Statement TCR-1).

5.18.5 IMPACTS AND MITIGATION MEASURES

TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**
- **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Impact Analysis: No archeological or tribal cultural resources have been identified within the City. The Cultural Resources Assessment concludes the lack of identified resources is likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites. The Planning Area is located within the traditional territory of the Gabrielino or Tongva Indians. At the time of publication of this EIR, no Tribal Organizations have requested formal consultation with the City with regards to the Project.

Prehistoric archaeological sites and isolates are tribal cultural resources; additionally, plants and other natural resources, as well as geographic locations can also be tribal cultural resources. Grading of original in situ soils could expose buried tribal cultural resources and features including sacred sites. While the General Plan Update does not directly propose site-specific development with the potential to directly impact a tribal cultural resource, future development allowed under the General Plan Update could cause a substantial adverse change in the significance of previously undiscovered tribal cultural resources. This is considered a potentially significant impact.

The General Plan Update Resource Management Element includes policies and actions addressing tribal cultural resources. Proposed Policy RM-3.1 requires the protection of areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code. Policy RM-3.2 encourages the City to promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations. Policy RM-3.5 requires consultation with Native

American tribes that may be impacted by proposed development and land use policy changes, in accordance with State, local, and Tribal intergovernmental consultation requirements. Action RM-3a requires the City to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to CEQA. Action RM-3e requires, for all development proposals within areas with the potential to contain prehistoric/historic resources, a study to be conducted by a professional archaeologist to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery. Action RM-3g requires, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, that the City halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains is permitted until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

Potential impacts to tribal cultural resources associated with future development would be reduced through implementation of General Plan Update policies and actions. Subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Subsequent discretionary projects implemented in accordance with the General Plan Update would be subject to the provisions of AB 52 and may require tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded that could be impacted by subsequent projects. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-3.1: **Preservation.** Protect areas containing significant historic, archaeological, and paleontological resources, as defined by the California Public Resources Code.

Policy RM-3.2: **Documentation.** Promote community identity and local history by identifying, documenting, and appropriately archiving tangible and intangible cultural resources so they can be recognized, accessed, and appreciated by future generations.

Policy RM-3.5: **Tribal Consultation.** In accordance with State, local, and Tribal intergovernmental consultation requirements, consult with Native American tribes that may be impacted by proposed development and land use policy changes, as necessary.

Action RM-3a: Continue to assess development proposals for potential impacts to sensitive historic, archaeological, tribal cultural, and paleontological resources pursuant to the California Environmental Quality Act (CEQA).

Action RM-3e: For all development proposals within areas with the potential to contain prehistoric/historic resources, the City shall require a study to be conducted by a professional archaeologist. The objective of the study will be to determine if significant archaeological resources are potentially present and if the project will significantly impact these resources. If significant impacts are identified, the City may require the project to be modified to avoid the impacts, or require mitigation measures to mitigate the impacts. Mitigation may involve archaeological investigation and resources recovery.

Action RM-3g: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall halt excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the descendants from the deceased Native Americans have made a recommendation to the landowner or the persons responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code section 5097.98, or the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being granted access to the site.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.18.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis,* identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to tribal cultural resources may occur. The cumulative projects' regional geologic setting and tribal cultural resource deposit sensitivity would be similar; however, the local geologic setting and tribal cultural significance would vary according to the site location and specific conditions.

Would the project, combined with other related cumulative projects, cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically

defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or**
- **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

Impact Analysis: Tribal cultural resource impacts are site specific and generally do not combine to result in cumulative impacts. Construction of the individual development projects allowed under the land use designations of General Plan Update may result in the discovery and removal of tribal cultural resources. The General Plan Update policies and actions, as well as Federal, State, and local regulations, would reduce the risk to tribal cultural resources in the region. As discussed above, site-specific development with the potential to impact tribal cultural resources would require a resource assessment and coordination with the tribes to determine the potential for tribal cultural resources and identification of mitigation measures to reduce potential impacts associated with the proposed development. Adherence to the General Plan Update policies and actions, and existing Federal, State and local regulations would avoid and/or minimize a cumulative loss of tribal cultural resources. Therefore, the General Plan Update's incremental contribution to cumulative tribal cultural resource impacts would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.18.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Tribal cultural resources impacts associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable tribal cultural impacts would occur as a result of the General Plan Update.

5.18.8 REFERENCES

Duke Cultural Resources Management, LLC, *Cultural and Paleontological Resource Study for the General Plan Update: City of Lawndale, Los Angeles County*, October 2020, updated July 2023.

This page intentionally left blank.

5.19 UTILITIES AND SERVICE SYSTEMS

5.19.1 PURPOSE

This section identifies existing water supply, water consumption, and distribution infrastructure; the nature and location of wastewater conveyance and treatment facilities and existing related infrastructure; stormwater discharge and drainage; solid waste services; and electric power, natural gas, and telecommunications services within the Planning Area and provides an analysis of potential impacts associated with implementation of the General Plan Update.

5.19.2 ENVIRONMENTAL SETTING

WATER SUPPLIES

Key Terms

Acre-feet (AF): The volume of one acre of water to a depth of one foot. Each acre-foot of water is equal to approximately 325,851.4 gallons.

BGS: Below ground surface.

GPD: Gallons per day.

GPM: Gallons per minute.

Groundwater: Water that is underground and below the water table, as opposed to surface water, which flows across the ground surface. Water beneath the earth's surface fills the spaces in soil, gravel, or rock formations. Pockets of groundwater are often called "aquifers" and are the source of drinking water for a large percentage of the population in the United States. Groundwater is often extracted using wells which pump the water out of the ground and up to the surface. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

MG: Million gallons

MGD: Million gallons per day

Surface water: Water collected on the ground or from a stream, river, lake, wetland, or ocean. Surface water is replenished naturally through precipitation, but is lost naturally through evaporation and seepage into soil.

Water Distribution System

The Planning Area is served by the Golden State Water Company (GSWC) Southwest System (Golden State Water Company 2021). The City is located within GSWC's Southwest System Service Area, which serves the cities of Gardena and Lawndale; parts of the cities of Carson, Compton, El Segundo, Redondo Beach, Hawthorne and Inglewood; and the adjacent unincorporated communities of Athens, Del Aire, El Camino Village, Lennox and Gardena Heights. The GSWC Southwest 2020 Urban Water Management Plan (UWMP) was prepared in accordance with the California Urban Water Management Planning Act, Water

Code Sections 10610 through 10657. The 2020 UMWP addresses GSWC's water management planning efforts to assure adequate water supplies to meet forecast demands through 2045. According to the 2020 UWMP, GSWC's Southwest System services an area of approximately 25.2 square miles containing 47,013 residences.

Water Infrastructure

The City is underlain by potable and non-potable water infrastructure owned and maintained by GSWC and West Basin Municipal Water District (WBMWD), respectively. GIS records provided by GSWC indicate there is approximately 59 miles of pipelines ranging in diameter from 2-inches to 16-inches within the City's boundary as shown on Figure 5.19-1, *Existing Water Infrastructure* (West Yost Associates 2020).

According to the 2020 UWMP, the Southwest area receives potable water from local groundwater and imported water purchased from the Metropolitan Water District of Southern California (MWD). Groundwater is pumped from GSWC's 13 active wells, which pump local groundwater from the Central subbasin and West Coast subbasin of the Coastal Plain of Los Angeles Groundwater Basin, and have a combined capacity of 13,400 gallons per minute. This groundwater is injected with 12.5 percent liquid sodium hypochlorite and 19 percent ammonia hydroxide to provide a disinfectant residual in the distribution system. All wells are also fluoridated, and five wells are treated for manganese removal. Treated groundwater is then blended with water purchases from WBMWD and Central Basin Municipal Water District (CBMWD), which are both in turn supplied by MWD. Purchased water is delivered through 12 interconnections with WBMWD and CBMWD and is already treated to potable standards upon delivery to GSWC. The Southwest System does not include any treatment facilities besides at wellheads. The System also has 13 emergency interconnections to allow sharing of supplies during short term emergencies or during planned shutdowns of primary supply sources. These interconnections are with the City of Hawthorne, City of Inglewood, California Water Service Company, Liberty Utilities, and Los Angeles Department of Water and Power. Each of these is for emergencies only and is not used in normal operations.

GSWC Southwest receives recycled water supplies from the WBMWD. WBMWD delivers water from the West Basin Recycled Water Project where water is collected from the City of Los Angeles' Hyperion Waste Water Treatment Plant and treated to meet Title 22 standards for delivery and use. Secondary effluent from the Hyperion Wastewater Treatment Plant is pumped via the Hyperion Secondary Effluent Pump Station, which is owned and maintained by WBMWD, to WBMWD's main treatment facility, the Edward C. Little Water Recycling Facility. WBMWD owns all the existing recycled water pipelines that fall within the boundaries of the City and is planning to expand its distribution system to continue offsetting potable water demands in its service area (West Yost Associates 2020).

Projected Water Demands and Supply

GSWC Southwest's water assets consist of adjudicated groundwater supplies, leased or purchased groundwater supplies, purchased water from CBMWD and WBMWD, and recycled water. Table 5.19-1, *2020 Annual Potable Water Supplies for the GSWC Southwest Service Area by Source*, provides an assessment of GSWC Southwest's current (2020) potable water supplies.

Table 5.19-1
2020 Annual Potable Water Supplies for the GSWC Southwest Service Area by Source

Water Supply	Water Supplier	Volume (AF)
Purchased or Imported Water	Central Basin Municipal Water District	1,522
Purchased or Imported Water	West Basin Municipal Water District	17,533
Groundwater	Central Subbasin in the Coastal Plain of Los Angeles Groundwater Basin	3,010
Groundwater	West Coast Subbasin in the Coastal Plain of Los Angeles Groundwater Basin	4,162
Total	--	**26,227**
Source: Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan,* July 2021.		

GSWC Southwest's groundwater rights and future leases within the Central Basin are shared among all GSWC systems in the basin. Therefore, the actual pumping amounts for wells in each system could vary based on GSWC's overall water supply management. Access to local groundwater and imported water affords GSWC flexibility to meet demands in all of its systems. In addition to GSWC's allowed pumping allocation in the Central Basin and adjudicated rights in the West Coast Basin, GSWC also has the ability to annually lease groundwater rights. Leased groundwater quantities are determined annually for all GSWC systems that obtain groundwater from the basin. While quantifiable estimates of groundwater leases are not available for future years, projections are based on historical pumping amounts, including leased groundwater, and assume that available unpumped groundwater will continue to be available as in the past. Table 5.19-2, *Projected Water Supplies for the GSWC Southwest Service Area (AFY)*, provides an assessment of GSWC Southwest's projected potable water supplies.

Table 5.19-2
Projected Water Supplies for the GSWC Southwest Service Area (AFY)

Water Supply	2025	2030	2035	2040	2045
Purchased Imported Water (from CBMWD)	2,100	2,100	2,100	2,100	2,100
Purchased Imported Water (from WBMWD)	21,000	21,000	21,000	21,000	21,000
Groundwater (from Central Subbasin)	16,439	16,439	16,439	16,439	16,439
Groundwater (from West Coast Subbasin)	7,502	7,502	7,502	7,502	7,502
Groundwater (from West Coast Subbasin - leased)	5,000	5,000	5,000	5,000	5,000
GSWC Southwest Projected Water Supply*	52,041	52,041	52,041	52,041	52,041
GSWC Southwest Projected Supply Use	26,939	27,347	27,761	28,181	28,608

Source: Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan,* July 2021.
* Note that these supplies represent the total potable supplies available to GSWC Southwest but include supplies shared within GSWC service areas within the West Coast Basin and Central Basin.

GSWC's 2020 UWMP shows growth projections for the number of service connections and water use for the years 2025 through 2045 in 5-year increments and were developed using an approach based on projections from the Southern California Association of Governments (SCAG). The SCAG-based water use projections are based on the population and housing growth rates, which used the City of Hawthorne as representative of the Southwest System. SCAG (Hawthorne) household projections were used to determine the growth in single family and multi-family service connections. Similarly, single-family account growth rates were used to determine the growth for commercial, industrial, institutional-government, agricultural irrigation, landscape, and other service connections. The SCAG-based methodology does not include geographic growth such as tariff area expansion.

The projected water use for the Southwest System's retail service area was calculated by applying the corresponding water use factors to the projected number of retail service connections in each UWMP category. Table 5.19-3, *Projected Demands for Potable Water – GSWC Southwest*, presents the data from the 2020 UWMP for the projected potable water demands for the Southwest System through the year 2045.

Table 5.19-3
Projected Demands for Potable Water – GSWC Southwest

Use Type	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Single Family	9,427	9,570	9,715	9,862	10,011
Multi Family	8,738	8,870	9,005	9,141	9,279
Commercial/ Institutional	6,763	6,866	6,970	7,075	7,182
Industrial	404	410	416	422	429
Landscape	422	428	435	442	448
Other	0	0	0	0	0
Water Loss	1,185	1,203	1,221	1,239	1,258
Total	**26,939**	**27,347**	**27,761**	**28,181**	**28,608**
Source: Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan,* July 2021.					

The 2020 UWMP's Tables 5-2 and 5-3 conclude that GSWC Southwest's supplies are expected to meet demands in normal-, single dry-, and multiple dry-year conditions through 2045; see Table 5.19-4, *GSWC Southwest Service Reliability Assessment for Normal-, Single Dry-, and Multiple Dry-Years*.

Table 5.19-4
GSWC Southwest Service Reliability Assessment for Normal-, Single Dry-, and Multiple Dry-Years

Demand and Supply Projections (in acre-feet)	2025	2030	2035	2040	2045
Normal Year					
Service Area Supply	26,939	27,347	27,761	28,181	28,608
Service Area Demand	26,939	27,347	27,761	28,181	28,608
Difference	0	0	0	0	0
Single-Dry Year					
Service Area Supply	29,633	30,082	30,537	31,000	31,469
Service Area Demand	29,633	30,082	30,537	31,000	31,469
Difference	0	0	0	0	0
Multiple-Dry Years (Year 1)					
Service Area Supply	29,633	30,082	30,537	31,000	31,469
Service Area Demand	29,633	30,082	30,537	31,000	31,469
Difference	0	0	0	0	0
Multiple-Dry Years (Year 2)					
Service Area Supply	29,722	30,172	30,629	31,093	31,469
Service Area Demand	29,722	30,172	30,629	31,093	31,469
Difference	0	0	0	0	0
Multiple-Dry Years (Year 3)					
Service Area Supply	29,812	30,263	30,721	31,187	31,469
Service Area Demand	29,812	30,263	30,721	31,187	31,469
Difference	0	0	0	0	0
Multiple-Dry Years (Year 4)					
Service Area Supply	29,902	30,354	30,814	31,280	31,469
Service Area Demand	29,902	30,354	30,814	31,280	31,469
Difference	0	0	0	0	0
Multiple-Dry Years (Year 5)					
Service Area Supply	29,992	30,446	30,907	31,375	31,469
Service Area Demand	29,992	30,446	30,907	31,375	31,469
Difference	0	0	0	0	0
Source: GSWC, *Southwest Service Area 2020 Urban Water Management Plan,* July 2021.					

According to the 2020 UWMP, water use projections for 2025 to 2045 are based on 55 gallons per capita per day (gpcd). Based on the current (2022) estimated Planning Area population of 37,948, existing water use within the Planning Area is approximately 2.1 million gallons per day (MGD), or 6.4 acre-feet per year (AFY).

WASTEWATER

Key Terms

Effluent: Effluent is an outflowing of water from a natural body of water, or from a man-made structure. Effluent in the man-made sense is generally considered to be water pollution, such as the outflow from a sewage treatment facility or the wastewater discharge from industrial facilities. In the context of waste

water treatment plants, effluent that has been treated is sometimes called secondary effluent, or treated effluent.

NPDES: Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

WWTP: Wastewater treatment plant. Treatment of wastewater may include the following processes: screening to remove large waste items; grit removal to allow sand, gravel, and sediment to settle out; primary sedimentation where sludge can settle out of the wastewater; secondary treatment to substantially degrade the biological content of the sewage; tertiary treatment to raise the quality of the effluent before it is discharged; and, discharge.

Wastewater Treatment and Sewer Collection

The City of Lawndale, along with the Los Angeles County Sanitation Districts (LACSD), provide wastewater services to the Planning Area. The City of Lawndale owns and operates local wastewater transmission lines within City limits, as shown on Figure 5.19-2, *Existing Sewer Infrastructure*. According to the City's 2014 Sewer System Management Plan, the City's Public Works Department manages the City-owned sanitary sewer collection system, which serves a population of approximately 32,000 residences (City of Lawndale 2014). The sanitary sewer collection system consists of 34 miles of gravity sewer lines ranging from eight to 12 inches in diameter and no pump stations. The City's local gravity sewer lines discharge into LACSD's facilities for conveyance to the Joint Water Pollution Control Plant (JWPCP). The City is responsible for ensuring that the public sewer infrastructure is correctly designed, adequately sized, and easily maintained.

The City is part of the Los Angeles County Department of Public Works' (LACDPW) Consolidated Sewer Maintenance District (CSMD) and, therefore, relies on the staff and resources of the LACDPW for the maintenance of its collection sewer system. The CSMD has maintained the City's facilities for more than 60 years and utilizes the Lawndale Yard as its primary sewer operation and maintenance services provider. The CSMD is not a special district and does not own any infrastructure. LACDPW's Sewer Maintenance Division is responsible for operational maintenance services of the City's sewer collection system, including cleaning, closed-circuit television inspection, manhole inspection, and repairs of the system. The CSMD also provides a supporting role in reviewing all proposed sewer plans for new developments in the City to ensure that they conform to County design standards and to ensure that requirements for acceptability for maintenance are met.

The LACSD owns, operates, and maintains an interconnected network of trunk sewers which convey wastewater to Joint Outfall System (JOS) treatment facilities. The City falls completely within the LACSD's District Number 5 service area. The LACSD's trunk system forms the backbone of the conveyance system. The JOS includes the Joint Outfall trunk sewers, which are typically high-capacity sewers with diameters

as large as 144-inches, and the LACSD trunk sewers, which generally feed the larger trunk sewers. LACSD owns and maintains approximately 9.1 miles of sewers within the City, including two Joint Outfall trunk sewers along with other various LACSD trunk lines; refer to Figure 5.19-2.

Wastewater Treatment Capacity

The City does not directly provide any wastewater treatment services. The City's local sewers discharge into the LACSD facilities for treatment and disposal. All sewage produced within the City is treated at LACSD's JWPCP, which provides both primary and secondary wastewater treatment for an average dry weather flow (DWF) of 280 MGD (West Yost Associates 2020). The JWPCP has a design capacity of 400 MGD. The plant serves a population of approximately 3.5 million people throughout Los Angeles County, including the City.

The treated wastewater is disinfected with hypochlorite and discharged to the Pacific Ocean through a network of outfalls. These outfalls extend 1.5 miles off the coast of Southern California near the Palos Verdes Peninsula to a depth of 200 feet. All of the JWPCP treated effluent is discharged because the JWPCP only provides primary and secondary treatment and do not meet Title 22 standards for using recycled water.

In general, wastewater flows are expected to increase in proportion to population growth within the JOS service area. Population forecasts are derived from projections by SCAG. As part of the LACSD's 2012 Clearwater Program Master Facilities Plan, these projections are then converted to flows using per capita generation rates. Contract and industrial flows are separately projected and added into the projected flow totals. As show in Table 5.19-5, *Annual Projected Buildout Flow vs. Current Treatment Capacity (MGD)*, the projected average flows at the JWPCP for 2050 are estimated to be 423 MGD, which is 23 MGD more than the plant's current permitted capacity. The LACSD continues to monitor and adjust its projected flows and would expand treatment capacity as needed based on these updates. No current plant expansion is being planned as ongoing water conservation efforts throughout the region continue to lower current wastewater flows. In addition, as part of its Clearwater Program Master Facilities Plan, LACSD has identified a recommended plan to expand the treatment capacity of San Jose Creek Water Reclamation Plant to address projected capacity exceedance and meet the needs of the JOS service area through the year 2050; refer to the Clearwater Program Master Facilities Plan (Los Angeles County Sanitation Districts 2012).

Table 5.19-5
Annual Projected Buildout Flow vs. Current Treatment Capacity (MGD)[1]

Treatment Plant	Projected Buildout Flow[2]	Current Treatment Capacity[3]
JWPCP	423	400

Source: West Yost Associates, *Background Report for Infrastructure Analysis for the City of Lawndale General Plan Update,* December 31, 2020.
Notes:
1. Projected wastewater flow and current treatment capacity are based on the 2012 Clearwater Program Master Facilities Plan.
2. Projected buildout wastewater flow is for the year 2050.
3. Current treatment capacity is for the year 2015.

According to the LACSD's 2012 Clearwater Program Master Facilities Plan, the residential/commercial per-capita wastewater generation rate within the JOS service area is 83 gpcd (Los Angeles County Sanitation Districts 2012). Based on the current (2022) estimated Planning Area population of 37,948, the Planning Area currently generates approximately 3.1 MGD of wastewater.

STORMWATER AND DRAINAGE

The information in this section focuses on the potential for the General Plan Update to result in the demand for new or expanded stormwater drainage facilities. Section 5.10, *Hydrology and Water Quality*, includes an expanded analysis of water quality, flooding, and other stormwater related issues.

Stormwater and Flood Control Facilities

Storm drain infrastructure in the City is jointly owned and operated by the City and County. The Los Angeles County Flood Control District (LACFCD) provides flood control services and drainage infrastructure within unincorporated County areas and 86 incorporated cities, including the City of Lawndale (Los Angeles County Flood Control District 2023). LACFCD maintains a network of catch basins, storm drains, laterals, and the Dominguez Channel to convey stormwater out of the Planning Area and eventually discharge to the Pacific Ocean via Los Angeles Harbor. Figure 5.19-3, *Existing Stormwater and Flood Control Facilities*, shows stormwater infrastructure within the Planning Area. According to LACFCD's GIS database, there are approximately 11.8 miles of LACFCD-owned gravity mains within the City (West Yost Associates 2020). The City owns and maintains a number of smaller catch basins, storm drains, and laterals that directly flow into the LACFCD system, eventually discharging into the Pacific Ocean via Los Angeles Harbor.

SOLID WASTE

The City has a contract with Republic Services to collect solid waste, recycling, and green waste within City limits (City of Lawndale 2023). Universal Waste Systems, Inc. currently provides trash collection and recycling services to the unincorporated area of El Camino Village within the Sphere of Influence (LACDPW 2023a). With minor exceptions for certain homeowners' associations, these two waste haulers handle all residential, commercial, and industrial collections within the Planning Area.

Key Terms

Class I landfill: A landfill that accepts for disposal 20 tons or more of municipal solid waste daily (based on an annual average); or one that does not qualify as a Class II or Class III municipal solid waste landfill.

Class II landfill: A landfill that (1) accepts less than 20 tons daily of municipal solid waste (based on an annual average); (2) is located on a site where there is no evidence of groundwater pollution caused or contributed by the landfill; (3) is not connected by road to a Class I municipal solid waste landfill, or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and (4) serves a community that experiences (for at least three months each year) an interruption in access to surface transportation, preventing access to a Class I landfill, or a community with no practicable waste management alternative.

Class III landfill: A landfill that is not connected by road to a Class I landfill or a landfill that is located at least 50 miles from a Class I landfill. Class III landfills can accept no more than an average of one ton daily of ash from incinerated municipal solid waste or less than five tons daily of municipal solid waste.

Transfer station: A facility for the temporary deposit of some wastes. Transfer stations are often used as places where local waste collection vehicles will deposit their waste cargo prior to loading into larger vehicles. These larger vehicles will transport the waste to the end point of disposal or treatment.

Waste Management Plan: A Waste Management Plan (WMP) is a completed WMP form, approved by the City, submitted by the applicant for any covered project. Prior to project start, the WMP shall identify the types of construction and demolition (C&D) debris materials that will be generated for disposal and recycling. A completed WMP contains actual weight or volume of the material disposed recycled receipts.

Waste Disposal Facilities

In 2019, the majority (89 percent) of waste from the City went to four waste disposal facilities: Olinda Alpha Landfill (34 percent); Sunshine Canyon Landfill (25 percent); El Sobrante Landfill (16 percent); and Southeast Resource Recovery Facility (14 percent) (CalRecycle 2023a). The City disposed of approximately 6,462 tons at Olinda Alpha Landfill, 4,655 tons at Sunshine Canyon Landfill, and 2,940 tons at El Sobrante Landfill. Other landfills that received a relatively small amount of waste from the City in 2019 include:

- Frank R. Bowerman Sanitary Landfill (1,523 tons);
- Azusa Land Reclamation Co. Landfill (210 tons);
- Chiquita Canyon Sanitary Landfill (206 tons);
- Antelope Valley Public Landfill (80 tons); and
- Simi Valley Landfill & Recycling Center (2 tons).

In addition, 2,691 tons were disposed of at the Southeast Resource Recovery Facility, a transformation facility that uses mass burn technology to reduce the volume of solid waste by about 80 percent, while recovering electrical energy (Los Angeles County Sanitation Districts 2023).

Olinda Alpha Landfill

The Olinda Alpha Landfill is a Class III solid waste landfill located just outside of Brea, California. The property spans approximately 565 acres, with approximately 453 acres allocated for waste disposal (CalRecycle 2023b). The Olinda Alpha Landfill has a daily permitted maximum of 8,000 tons per day (TPD) and a remaining capacity of 17.5 million cubic yards as of 2020. The landfill has enough projected capacity to serve residents and businesses until approximately 2036.

Sunshine Canyon Landfill

The Sunshine Canyon Landfill is a Class III solid waste landfill located in Los Angeles, California. The property spans approximately 1,036 acres with approximately 363 acres allocated for waste disposal (CalRecycle 2023c). The Sunshine Canyon Landfill has a daily permitted maximum of 12,100 TPD and a remaining capacity of 77,900,000 cubic yards as of 2018. The landfill has enough projected capacity to serve residents and businesses until approximately 2037.

El Sobrante Landfill

The El Sobrante Landfill is a Class III solid waste landfill located just outside of Corona, California. The property spans approximately 1,322 acres with approximately 468 acres allocated for waste disposal (CalRecycle 2023d). The El Sobrante Landfill has a daily permitted maximum of 16,054 TPD and a remaining capacity of 143,977,170 cubic yards as of 2018. The landfill has enough projected capacity to serve residents and businesses until approximately 2051.

Southeast Resource Recovery Facility

The Southeast Resource Recovery Facility is a Transformation Facility located in the City of Long Beach. The facility is a waste-to-energy facility that uses mass burn technology to reduce the volume of solid waste by about 80 percent, while recovering electrical energy (Los Angeles County Sanitation Districts 2023). Refuse is inspected prior to combustion and non-combustible materials are recycled or disposed of in the same manner as other waste in the City of Long Beach. Treated combustion ash is used at a local landfill as road base material. The Southeast Resource Recovery Facility has a daily permitted maximum of 2,240 TPD (CalRecycle 2023e).

Solid Waste Generation Rates and Volumes

The California Integrated Waste Management Act of 1989 (AB 939), requires each city or county's source reduction and recycling element to include an implementation schedule showing that a city or county must divert 50 percent of solid waste from landfill disposal or transformation on and after January 1, 2000. SB 1016, passed in 2008, required the 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent. AB 341, passed in 2012, requires that California increase its diversion rate to 75 percent by 2020.

The California Department of Resources Recycling and Recovery (CalRecycle) tracks and monitors solid waste generation rates on a per capita basis. Per capita solid waste generation rates and total annual solid waste disposal volumes for the City of Lawndale between 2015 and 2021 are shown in Table 5.19-6, *Solid Waste Generation Rates in City of Lawndale*.

Table 5.19-6
Solid Waste Generation Rates in City of Lawndale

Year	Waste Generation Rate (pounds/person/day)		Total Disposal Tonnage (tons/year)
	Per Resident	Per Employee	
2015	2.0	9.1	15,825.70
2016	2.2	9.8	16,205.01
2017	2.9	14.5	19,440.34
2018	2.3	11.5	17,288.56
2019	2.7	12.7	18,770.93
2020	2.9	13.9	20,790.63
2021	2.1	11.4	15,322.66
Cal Recycle Target Rate	<3.4	<21.1	--

Source: California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Per Capita Disposal Trends*, https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports, accessed March 10, 2023f.

The City has complied with State requirements to reduce the volume of solid waste through recycling and reuse of solid waste. As shown in Table 5.19-6, the City's per capita disposal rates have consistently satisfied the target rate established by CalRecycle of 3.4 pounds/person/day for residents and 21.1 pounds/person/day for employees. The per capita disposal rate is used as one of several factors that CalRecycle considers in determining a jurisdiction's compliance with the intent of AB 939. It allows CalRecycle and jurisdictions to focus on successful implementation of diversion programs. CalRecycle data also shows that the City of Lawndale has increased landfill diversion programs for solid waste, from 38 diversion programs in 2007 to 40 in 2021.

Hazardous Waste Disposal

Household hazardous waste are products that are flammable, corrosive, reactive or toxic. Examples of household hazardous waste include: automotive fluids, propane, paint and solvents, medical sharps, fertilizers, pool chemicals, cleaning products, pesticides, herbicides, and nonempty aerosol cans. Los Angeles County operates permanent household hazardous waste collection facilities that offer service on a regular basis and temporary one-day and two-day household hazardous waste events throughout the year to collect household hazardous waste. The closest permanent household hazardous waste collection facility to Lawndale is the Hyperion S.A.F.E. Center in Playa Del Rey (LACDPW 2023b).

Separately, as of October 19, 2012, Assembly Bill 1343 established the PaintCare program. The program makes proper paint disposal more convenient for the public by setting up hundreds of new paint drop-off sites at retailers throughout the State. Electronic waste (e-waste) is anything with a circuit board or battery. It is illegal to dispose of e-Waste in any of the regular carts. Residents can legally dispose of these items at designated collection facilities or e-waste recycling events. Universal wastes are hazardous wastes that contain mercury, lead, cadmium, copper, and other substances hazardous to human and environment health. In general, universal waste may not be discarded in solid waste landfills. Residents

and businesses can generally contact a waste disposal service to arrange a pick-up of E-waste or universal waste.

ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS

Infrastructure to deliver electricity and natural gas service throughout the Planning Area is currently in place, and can generally provide these services to new development on request.

Electric Power

Electrical power to the Planning Area is provided by Southern California Edison (SCE). SCE provides electrical services to residences and businesses throughout Southern California. SCE's is one of the nation's largest electric utilities delivering power to 15 million people in 50,000 square-miles across central, coastal and Southern California including 180 incorporated cities and 15 counties (Southern California Edison 2023). SCE maintains approximately 12,635 miles of transmission lines, 91,375 miles of distribution lines (less streetlight miles), 1,433,336 electric poles, 720,800 distribution transformers, and 2,959 substation transformers. SCE obtains electricity from various generating sources that utilize natural gas, fossil fuels, hydroelectric sources, nuclear energy, and renewable resources, such as solar and wind.

Natural Gas

The Southern California Gas Company (SoCalGas) provides natural gas service to the Planning Area. SoCalGas is the nation's largest natural gas distribution utility and delivers gas services to 21.8 million consumers through 5.9 million meters in more than 500 communities (Southern California Gas Company 2023). SoCalGas service territory encompasses approximately 24,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.

Telecommunications

The Planning Area is served by multiple telecommunications providers. Providers in the Planning Area include Spectrum, T-Mobile, AT&T, and Frontier, which both provide internet access, telephone, and television services (Highspeedinternet.com 2023).

5.19.3 REGULATORY SETTING

WATER SUPPLIES

State

California Department of Health Services

The California Department of Health Services, Division of Drinking Water and Environmental Management, oversees the Drinking Water Program. The Drinking Water Program regulates public water systems and certifies drinking water treatment and distribution operators. It provides support for small water systems and for improving their technical, managerial, and financial capacity. It provides subsidized funding for water system improvements under the State Revolving Fund and Proposition 50 programs. The Drinking Water Program also oversees water recycling projects, permits water treatment devices, supports and promotes water system security, and oversees the Drinking Water Treatment and Research Fund for MTBE and other oxygenates.

California Code of Regulations

California Code of Regulations (CCR) Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Consumer Confidence Report Requirements

CCR Title 22, Chapter 15, Article 20 requires all public water systems to prepare a Consumer Confidence Report for distribution to its customers and to the Department of Health Services. The Consumer Confidence Report provides information regarding the quality of potable water provided by the water system. It includes information on the sources of the water, any detected contaminants in the water, the maximum contaminant levels set by regulation, violations and actions taken to correct them, and opportunities for public participation in decisions that may affect the quality of the water provided.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (Water Code Section 10720 et seq.) was enacted in 2014. The Act, and related amendments to California law, require that all groundwater basins designated as high- or medium-priority in the California Department of Water Resources' (DWR) California Statewide Groundwater Elevation Monitoring (CASGEM) program and that are subject to critical overdraft conditions must be managed under a new Groundwater Sustainability Plan (GSP), or a coordinated set of GSPs, by January 31, 2020. High- and medium-priority basins that are not subject to critical overdraft conditions must be managed under a GSP by January 31, 2022. Where GSPs are required, one or more local groundwater sustainability agencies (GSAs) must be formed to cover the basin and prepare and implement applicable GSPs. The Act does not apply to basins that are managed under a court-approved adjudication, or to low-or very-low-priority basins.

A GSA has the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and to request revisions of basin boundaries, including establishing new subbasins. The preparation of a GSP by a GSA is exempt from the California Environmental Quality Act (CEQA). Each GSP must include a physical description of the covered basin, such as groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan would affect other plans, including city and county general plans.

The Act defines groundwater as "water beneath the surface of the earth within the zone below the water table in which the soil is completely saturated with water but does not include water that flows in known and definite channels." A groundwater extraction facility is defined as "a device or method for extracting groundwater from within a basin" Water Code Section 10721(g-h). GSPs are reviewed by the DWR to ensure that, over a period of 20 years, "sustainable groundwater management" is achieved. As defined

by the Act, sustainable groundwater management means that groundwater uses within basins managed by a GSP would not cause any of the following "undesirable results":

- Chronic lowering of groundwater levels (not including overdraft during a drought, if a basin is otherwise managed);
- Significant and unreasonable reductions in groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degradation of water quality;
- Significant and unreasonable land subsidence; and
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses (Water Code Section 10721(w)).

Water Conservation Act of 2009

Water Code Sections 10800, et seq. creates a framework for future planning and actions by urban (and agricultural) water suppliers to reduce California's water use. The law requires urban water suppliers to reduce Statewide per capita water consumption by 20 percent by 2020. Additionally, the State is required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent by 2015. Each urban retail water supplier was required to develop water use targets and an interim water use target by July 1, 2011. Each urban retail water supplier was required, by July 2011, to include in their water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

Efficiency Standards

CCR Title 24 contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. CCR Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote water conservation. In addition, several California laws listed below require water-efficient plumbing fixtures in structures:

- CCR Title 20 Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters;
- CCR Title 20 Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations;
- CCR Title 24 Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required; and
- Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required

to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 AF of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan.

Senate Bill (SB) 610 and Assembly Bill (AB) 901

The State Legislature passed SB 610 and AB 901 in 2001. Both measures modified the Urban Water Management Planning Act.

SB 610 requires additional information in an urban water management plan if groundwater is identified as a source of water available to an urban water supplier. It also requires that the plan include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 requires a city or county that determines a project is subject to CEQA to identify any public water system that may supply water to the project and to request identified public water systems to prepare a specified water supply assessment. The assessment must include, among other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and water received in prior years pursuant to these entitlements, rights, and contracts.

AB 901 requires an urban water management plan to include information, to the extent practicable, relating to the quality of existing sources of water available to an urban water supplier over given time periods. AB 901 also requires information on the manner in which water quality affects water management strategies and supply reliability. The bill requires a plan to describe plans to supplement a water source that may not be available at a consistent level of use, to the extent practicable. Additional findings and declarations relating to water quality are required.

Senate Bill (SB) 221

SB 221 adds Government Code Section 66455.3, requiring that the local water agency be sent a copy of any proposed residential subdivision of more than 500 dwelling units within five days of the subdivision application being accepted as complete for processing by the city or county. It also adds Government Code Section 66473.7, establishing detailed requirements for establishing whether a "sufficient water supply" exists to support any proposed residential subdivisions of more than 500 dwellings, including any such subdivision involving a development agreement. When approving a qualifying subdivision tentative map, the city or county must include a condition requiring availability of a sufficient water supply. The applicable public water system must provide proof of availability. If there is no public water system, the city or county must undertake the analysis described in Government Code Section 66473.7. The analysis must include consideration of effects on other users of water and groundwater.

Local

Greater Los Angeles County Integrated Regional Water Management Plan (IRWMP)

The 2014 Greater Los Angeles County IRWMP is a regional plan designed to improve collaboration in water resources management. The IRWMP identifies a comprehensive set of solutions to: reduce the Region's reliance on imported water; comply with water quality regulations by improving the quality of urban runoff, stormwater, and wastewater; protect, restore and enhance natural processes and habitats; increase watershed friendly recreational space for all communities; reduce flood risk in flood prone areas by either increasing protection or decreasing needs using integrated flood management approaches; and adapt to and mitigate against climate change vulnerabilities.

Golden State Water Company Southwest 2020 Urban Water Management Plan

Urban water suppliers such as GSWC Southwest are required to prepare and adopt an UWMP every five years. The UWMP provides water suppliers with a reliable management action plan for long-term resource planning to ensure adequate water supplies are available to meet existing and future water supply needs. The UWMP must demonstrate water supply reliability in a normal year, single dry year, and droughts lasting at least five years over a twenty-year planning horizon. GSWC Southwest's 2020 UWMP integrates local and regional land use planning, regional water supply, infrastructure, and demand management projects to address short-term and long-term water conditions and management.

City of Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 3.14, *Utility Users Tax*, imposes a tax for users of various utilities within the City in order to fund municipal utility services. Section 3.14.090*, Water Users Tax,* imposes a tax on every person in the City using water which is delivered through mains or pipes.

Municipal Code Chapter 8.40, *Water Conservation*, allows the City Council to declare voluntary and mandatory water restrictions, as appropriate to water supply conditions. The stages include: conservation watch, drought watch, and drought emergency.

Municipal Code Title 15, *Buildings and Construction*, adopts various uniform building and construction codes. Chapter 15.28, *Green Building Standards Code*, adopts the 2022 California Green Building Standards Code, also referred to as CALGreen. CALGreen includes regulations to improve water efficiency and conservation.

Municipal Code Chapter 17.88, *Water Efficient Landscape*, promotes water-efficient landscaping by establishing standards for the design, maintenance, and install of water efficient landscapes in new and substantially altered or expanded existing development projects.

WASTEWATER

Federal

Clean Water Act

The Clean Water Act (CWA) (33 United States Code Section 1251 et seq.) is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory

tools to sharply reduce direct pollutants discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water" (United States Environmental Protection Agency n.d.).

The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. The CWA makes it illegal to discharge pollutants from a point source to the waters of the United States. CWA Section 402 creates the National Pollutant Discharge Elimination System (NPDES) regulatory program. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by the CWA "pretreatment" program.

State

State Water Resources Control Board/Regional Water Quality Control Board

In California, all wastewater treatment and disposal systems fall under the overall regulatory authority of the State Water Resources Control Board (SWRCB) and the nine California Regional Water Quality Control Boards (RWQCBs), who are charged with the responsibility of protecting beneficial uses of State waters (ground and surface) from a variety of waste discharges, including wastewater from individual and municipal systems. The Planning Area falls within the jurisdiction of the Santa Ana RWQCB.

The RWQCB's regulatory role often involves the formation and implementation of basic water protection policies. These are reflected in the individual RWQCB's Basin Plan, generally in the form of guidelines, criteria and/or prohibitions related to the siting, design, construction, and maintenance of on-site sewage disposal systems. The SWRCB's role has historically been one of providing overall direction, organizational and technical assistance, and a communications link to the State legislature.

The RWQCBs may waive or delegate regulatory authority for on-site sewage disposal systems to counties, cities or special districts. Although not mandatory, it is commonly done and has proven to be administratively efficient. In some cases, this is accomplished through a Memorandum of Understanding (MOU), whereby the local agency commits to enforcing the Basin Plan requirements or other specified standards that may be more restrictive. The RWQCBs generally elect to retain permitting authority over large and/or commercial or industrial on-site sewage disposal systems, depending on the volume and character of the wastewater.

Local

Los Angeles County Sanitation Districts Master Connection Fee Ordinance

The LACSD Master Connection Fee Ordinance imposes fees for connecting to the LACSD wastewater system, or for increasing the strength or quantity of wastewater discharged from connected facilities, and to provide for the collection of those fees. Revenue from the Ordinance is used to fund LACSD's capital facilities and the JOS capital facilities.

Los Angeles County Sanitation Districts Wastewater Treatment Surcharge Program

The LACSD charges an annual fee for wastewater collection, treatment, and disposal services for all companies that discharge more than one million gallons of wastewater to the public sewerage system during the fiscal year, or have high strength waste.

City of Lawndale Sewer System Management Plan (2014)

The City's Sewer System Management Plan contains policies and procedures related to the design and maintenance of the City's sewer system to prevent sanitary sewer overflows. The Plan describes responsivities, preventive maintenance activities, conditions assessments, and standards for construction and design of sanitary sewers within the City.

City of Lawndale Municipal Code

Municipal Code Title 13, *Public Services*, addresses wastewater and storm drains within the City. Chapter 13.04, *Sanitary Sewers and Industrial Waste* Code, adopts Title 20, Division 2 of the Los Angeles County Code as the Sanitary Sewer and Industrial Waste Ordinance for the City of Lawndale. The ordinance regulates discharges of wastewater, including industrial waste discharges, into sanitary sewers within the City. Chapter 13.08, *Sewer Capacity – Peak-flow Charges*, also known as the City of Lawndale Sewer Charge Code, recognizes that the City's existing sewers were not designed to accommodate the increased flow of sewage from certain areas being developed, and establishes a means of providing adequate sewers required for future development. The Sewer Charge Code establishes a charge to be collected from properties that propose to discharge to the public sewer quantities of sewage in excess of the quantity for which the system was designed; and to establish a fund in which these charges may be deposited and from which monies will be available for the sanitary sewer reconstruction program. Section 13.08.070 prevents a building permit from being issued if the anticipated sewage from the proposed use is found by the City Engineer to exceed the capacity available in the public sewer. Section 13.08.080 requires that the size and grade of each public sewer must be such as to provide sufficient capacity for peak flow rates of discharge at all times. Section 13.08.090 outlines the required information and charges necessary for building permit applicants.

STORMWATER AND FLOOD CONTROL FACILITIES

Federal

Clean Water Act

The CWA, initially passed in 1972, regulates the discharge of pollutants into watersheds throughout the nation. Section 402(p) of the act establishes a framework for regulating municipal and industrial

stormwater discharges under the NPDES Program. Section 402(p) requires that stormwater associated with industrial activity that discharges either directly to surface waters or indirectly through municipal separate storm sewers must be regulated by an NPDES permit.

The SWRCB is responsible for implementing the CWA and does so through issuing NPDES permits to cities and counties through regional water quality control boards. Federal regulations allow two permitting options for storm water discharges (individual permits and general permits). Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharge in the Planning Area is subject to the Waste Discharge Requirements (WDRs) of the MS4 Permit (R4-2012-0175).

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, oceans, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the CWA, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the EPA Regional Administrator (EPA Region 9). The terms of these NPDES permits implement pertinent provisions of the CWA and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti-degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and therefore must be updated regularly. To expedite the permit issuance process, the RWQCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from construction sites statewide. Stormwater discharges from industrial and construction activities in the Planning Area can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

Construction throughout the Planning Area could disturb more than one acre of land surface for centralized and regional structural BMPs (and possibly for those distributed structural BMPs larger than one acre), affecting the quality of stormwater discharges into waters of the United States. The City would therefore be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002, Construction General Permit, as amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one or more acres

of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.

The Construction General Permit requires the development and implementation of a SWPPP that includes specific BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. The SWPPP BMPs are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area.

State

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the Regional Water Quality Control Boards (RWQCBs) power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a Water Quality Control Plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

State Water Resource Control Board (State Water Board) Storm Water Strategy

The Storm Water Strategy is founded on the results of the Storm Water Strategic Initiative, which served to direct the State Water Board's role in storm water resources management. The Storm Water Strategy developed guiding principles to serve as the foundation of the storm water program; identified issues that support or inhibit the program from aligning with the guiding principles; and proposed and prioritized projects that the Water Boards could implement to address those issues. The State Water Board staff created a strategy-based document called the Strategy to Optimize Management of Storm Water (STORMS). STORMS includes a program vision, missions, goals, objectives, projects, timelines, and consideration of the most effective integration of project outcomes into the Water Board's Storm Water Program.

Local

Water Quality Control Plan (Basin Plan) for the Los Angeles Region

A Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The Basin Plan is a resource for the Regional Board and others who use water and/or discharge wastewater in the region that the Basin Plan is designed to cover. Other agencies and

organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

The Los Angeles Region (Region 4) has jurisdiction over the coastal drainages between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County. The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties covers coastal Los Angeles County, including the Planning Area.

Dominguez Channel Watershed Management Area – Enhanced Watershed Management Program

The Dominguez Channel Watershed Management Area Enhanced Watershed Management Program (EWMP) was developed pursuant to the requirements set forth by Order No. R4-2012-0175, Los Angeles County Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (MS4 Permit). The EWMP identifies water quality priorities and watershed control measures for compliance with all Dominguez Channel TMDLs. The EWMP Plan, along with a Coordinated Monitoring Plan, serves as a guiding document for implementing water quality improving infrastructure, policies, and programs. The City of Lawndale is a participating member in the EWMP.

City of Lawndale Municipal Code

Municipal Code Title 13, *Public Services*, addresses wastewater and storm drains within the City. Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, establishes stormwater runoff controls and best management practices (BMPs) to prevent and/or reduce the quantity of pollutants from being discharged into the Municipal Separate Storm Sewer System (MS4).

SOLID WASTE

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 to address the huge volumes of municipal and industrial solid waste generated nationwide. After several amendments, the Act as it stands today governs the management of solid and hazardous waste and underground storage tanks (USTs). RCRA, enacted in 1976, is an amendment to the Solid Waste Disposal Act of 1965. RCRA has been amended several times, most significantly by the Hazardous and Solid Waste Amendments of 1984. RCRA is a combination of the first solid waste statutes and all subsequent amendments. RCRA authorizes the Environmental Protection Agency (EPA) to regulate waste management activities. RCRA authorizes states to develop and enforce their own waste management programs, in lieu of the Federal program, if a state's waste management program is substantially equivalent to, consistent with, and no less stringent than the Federal program.

State

California Integrated Waste Management Act (AB 939 and SB 1322)

The California Integrated Waste Management Act of 1989 (AB 939 and SB 1322) requires every city and county to prepare a Source Reduction and Recycling Element to its Solid Waste Management Plan that

identifies how each jurisdiction will meet the mandatory State waste diversion goals of 25 percent by 1995 and 50 percent by 2000. The purpose of AB 939 and SB 1322 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible." The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. The Act has established a waste management hierarchy, as follows: Source Reduction; Recycling; Composting; Transformation; and Disposal.

California Integrated Waste Management Board Model Ordinance

Subsequent to the Integrated Waste Management Act, additional legislation was passed to assist local jurisdictions in accomplishing the goals of AB 939. The California Solid Waste Re-use and Recycling Access Act of 1991 (§42900-42911 of the Public Resources Code) directs the California Integrated Waste Management Board to draft a "model ordinance" relating to adequate areas for collecting and loading recyclable materials in development projects. The model ordinance requires that any new development project, for which an application is submitted on or after September 1, 1994, include "adequate, accessible, and convenient areas for collecting and loading recyclable materials." For subdivisions of single family detached homes, recycling areas are required to serve only the needs of the homes within that subdivision.

California Mandatory Commercial Recycling Law (AB 341)

Assembly Bill (AB) 341 directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. CalRecycle initiated formal rulemaking with a 45-day comment period beginning Oct. 28, 2011. The final regulation was approved by the Office of Administrative Law on May 7, 2012. The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California.

Beginning on July 1, 2012, businesses have been required to recycle, and each jurisdiction has implemented programs that include education, outreach, and monitoring. Jurisdictions were required to start reporting on their 2012 Electronic Annual Report (due August 1, 2013) on their initial education, outreach, and monitoring efforts, and, if applicable, on any enforcement activities or exemptions implemented by the jurisdiction.

In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020. This is not written as a 75 percent diversion mandate for each jurisdiction. The 50 percent disposal reduction mandate still stands for cities, counties, and State agencies (including community colleges) under AB 939. CalRecycle continues to evaluate program implementation as it has in the past through the Annual Report review process for entities subject to either AB 939.

Assembly Bill 1826 Mandatory Commercial Organics Recycling

In October 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that

consist of five or more units (please note, however, that multi-family dwellings are not required to have a food waste diversion program). Organic waste (also referred to as organics) means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In particular, the minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

Starting on January 1, 2019, businesses that generate four cubic yards or more of commercial solid waste per week shall arrange for organic waste recycling services. By Summer/Fall 2021, if CalRecycle determines that the statewide disposal of organic waste in 2020 has not been reduced by 50 percent of the level of disposal during 2014, the organic recycling requirements on businesses will expand to cover businesses that generate two cubic yards or more of commercial solid waste per week. Additionally, certain exemptions may no longer be available if this target is not met.

Senate Bill 1383 Short-lived Climate Pollutants: Organic Waste Methane Emissions Reductions

In September 2016, Governor Brown signed SB 1383, establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. The bill codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy, established pursuant to SB 605, in order to achieve reductions in the statewide emissions of short-lived climate pollutants. Actions to reduce short-lived climate pollutants are essential to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment.

As it pertains to solid waste, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Local

City of Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 8.28, *Solid Waste – Collection and Management*, establishes regulations for solid waste collection of residential and non-residential uses, and construction/demolition waste. Article VII regulates construction and demolition debris and requires diversion of at least sixty-five percent of all demolition and construction debris generated, unless a lower rate is approved by the City as a part of the project's waste reduction and recycling plan (WRRP). Applicants for a covered building or demolition permit must submit a WRRP as part of the permit process. Section 8.28.290, *Threshold Requirements*, establishes the thresholds for covered projects.

ELECTRICAL POWER, NATURAL GAS, AND TELECOMMUNICATIONS

Federal

Federal Energy Regulation Commission

The Federal Energy Regulatory Commission duties include the regulation of the transmission and sale of electricity and natural gas in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

State

California Public Utilities Commission

Established in 1911, the California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The commission is organized into several advisory units, an enforcement division, and a strategic planning group. SJP, SCE, and SoCalGas are regulated by the CPUC.

Local

City of Lawndale Municipal Code

The City of Lawndale Municipal Code Chapter 3.14, *Utility Users Tax*, imposes a tax for users of various utilities within the City in order to fund municipal utility services, including electricity, gas, and telephone.

5.19.4 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to utilities and service systems. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects (refer to Impact Statement USS-1);
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (refer to Impact Statement USS-2;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (refer to Impact Statement USS-3);
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals (refer to Impact Statement USS-4); and/or
- Not comply with Federal, state, and local management and reduction statutes and regulations related to solid waste (refer to Impact Statement USS-5).

5.19.5 IMPACTS AND MITIGATION MEASURES

USS-1: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis:

WATER

In regard to water facilities, the General Plan Update is expected to result in population and employment growth within the Planning Area, and thus, an overall increase in demand on water supply, which would necessitate construction of future water supply infrastructure. Based on the anticipated growth, as described in Section 3.0, *Project Description*, and summarized in Table 3-4, *General Plan 2045 Buildout by Land Use Designation,* buildout under the General Plan Update could yield a net change over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,000 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area. This increased demand for water infrastructure would be located within areas that are already developed and serviced by the GSWC.

Since no specific development projects are proposed as part of the General Plan Update, the environmental effects from constructing or expanding facilities are unknown at this time. All water infrastructure construction activities associated with future development would be subject to compliance with existing local, State, and Federal laws, ordinances, and regulations, which would ensure impacts are reduced to less than significant levels. The City would continue to coordinate with GSWC to ensure adequate water distribution facilities are available to serve future development. Lawndale Municipal Code Section 3.14.090*, Water Users Tax,* imposes a tax on water users in the City and would help fund necessary infrastructure improvements. Furthermore, these future water facilities would be subject to General Plan Update policies and actions intended to ensure the provision of water and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Resource Management Element Policy RM-6.1 promotes residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices. Action RM-6c directs the City to work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that

would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-2.1 coordinates with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded water facilities to a level that is less than significant.

WASTEWATER

In regard to wastewater, the General Plan Update is expected to result in increased population and employment growth within the Planning Area, and thus, an overall increase in demand on the existing sewer system associated with increased sewage flows.

The Planning Area is urbanized and contains existing wastewater infrastructure. As discussed above, the City's local sewers discharge into the LACSD facilities and are conveyed for treatment at LACSD's JWPCP. The JWPCP has a capacity of 400 MGD and treats approximately 260 MGD of wastewater, resulting in a remaining capacity of 140 MGD. The facility currently has capacity to serve the Planning Area. As shown in Table 5.19-5, LACSD projects an average flow of 423 MGD at the JWPCP for 2050, which exceeds the plant's current permitted capacity by 23 MGD. Based on the anticipated growth under the General Plan Update, as described in Section 3.0, and summarized in Table 3-4, buildout under the General Plan Update could yield a net change over existing conditions of an additional population of 9,482 people within the Planning Area. Using the wastewater generation rate of 83 gpcd from LACSD's 2012 Clearwater Program Master Facilities Plan, growth associated with implementation of the General Plan Update would generate 3.9 MGD of wastewater within the Planning Area, a net increase of 0.8 MGD (25.8 percent) over existing conditions.

As part of LACSD's Clearwater Program Master Facilities Plan, an assessment of future needs was conducted by comparing projected tributary flows within the JOS versus conveyance system capacity. The conveyance capacity was determined using the static GIS conveyance system model's baseline configuration. A capacity need was identified in those sewer line segments for which the static GIS conveyance system model determined that the depth of peak dry weather flow within the sewer was equal to, or greater than, 90 percent of the sewer's diameter. According to LACSD's Clearwater Program Master Facilities Plan, it is estimated that 12.1 miles of City-used Joint Outfall trunk sewers would need to be hydraulically relieved by 2050. No set timeline has been established for when those lines would be improved. The LACSD continues to monitor and adjust its projected flows and would expand conveyance infrastructure and treatment capacity as needed based on these updates. As the regional sewage conveyance agency, LACSD would take the lead in conducting any additional analyses and development of any necessary improvement plans. At such time, LACSD would utilize SCAG's population projection data as part of its projections, such that any change in the City's land use plans or population projections would ultimately be incorporated into any future analysis depending on the timing of such data updates.

The General Plan Update does not include specific development proposals; therefore, the environmental effects of future wastewater collection systems are unknown at this time. At the time future projects are proposed, they would be required to ensure sufficient local and trunk sewer capacity exists to serve the specific development. Pursuant to Lawndale Municipal Code Section 13.08.070, a building permit would not be issued if the anticipated sewage from a proposed project is found by the City Engineer to exceed the capacity available in the public sewer. Lawndale Municipal Code Chapter 13.08, *Sewer Capacity – Peak-flow Charges,* provides for sewer connection and facilities expansion fees for the City's local wastewater transmission lines. Additionally, LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand LACSD's wastewater services.

The General Plan Update includes policies and actions to ensure adequate wastewater services and facilities are available, and that potential environmental impacts associated with the implementation of new or expanded infrastructure would be reduced. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-3.1 directs the City to work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development. Policy CF-3.2 directs coordination with the CSMD to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained. Policy CF-3.3 proposes the City take a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy CF-3a directs the City to require that sufficient wastewater infrastructure capacity is available to serve proposed development prior to approval of the project; ensure the project applicant has paid the required fees prior to occupancy of any new development; and to periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded wastewater facilities to a level that is less than significant.

STORMWATER

The Planning Area is generally developed and served by existing stormwater drainage and conveyance facilities. As described above, storm drain infrastructure in the City is jointly owned and operated by the City and the LACFCD. The Planning Area is primarily developed, with limited areas of pervious surfaces. Although future development activities have the potential to slightly increase impervious areas within the Planning Area, the majority of development activities under the proposed General Plan Update would consist of infill and redevelopment on currently urbanized sites. Therefore, implementation of the Project would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations

would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements. The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities.

Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan Update. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this is a less than significant impact and no additional mitigation is required.

The General Plan Update policies and actions would further ensure that there is adequate stormwater drainage and flood control infrastructure to serve future development under the General Plan Update, and would ensure that future drainage and flood control infrastructure projects do not result in adverse environmental impacts. Proposed Resource Management Element Policy RM-6.4 directs the City to work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Action CF-4d reviews development projects to identify potential storm drain and drainage impacts and requires developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events. Action CF-4e requires project designs to minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize LID strategies, and utilize BMPs to reduce stormwater runoff. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded stormwater facilities to a level that is less than significant.

ELECTRICAL, NATURAL GAS, AND TELECOMMUNICATIONS

In regard to electrical, natural gas, and telecommunication services, the Planning Area is within the service areas of SCE, SoCalGas, and various telecommunication providers. The Planning Area is generally developed and existing electrical, natural gas, and telecommunications infrastructure exists within the Planning Area. New growth anticipated by the General Plan Update would require increased electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation

of facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future implementing projects under the General Plan Update would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Furthermore, these future facilities would be subject to General Plan Update policies and actions intended to ensure adequate provision of services and facilities and that potential environmental impacts associated with the implementation of new or expanded electrical, natural gas, and telecommunications infrastructure would be reduced. Proposed Resource Management Element Policy RM-5.4 promotes the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure. Action RM-5a implements energy conservation measures in public buildings. Action RM-5b encourages innovative building design, layout, and orientation techniques to minimize energy use. Action RM-5c directs the City to review development projects to ensure compliance with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-5.1 directs the City to work cooperatively with utility providers to promote the provision of adequate telecommunications services and facilities to serve the needs of existing and future residents and businesses. Action CF-5a directs the City to confer with telecommunications providers regarding major development plans and participate in the planning of the extension of utilities. The implementation of existing regulations and General Plan Update policies and actions would reduce impacts associated with the relocation or construction of new or expanded electrical, natural gas, and telecommunications facilities to a level that is less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

RESOURCE MANAGEMENT ELEMENT

Policy RM-5.4: **Energy-Efficient Materials.** Promote the use of energy-efficient materials, equipment, and design in public and private facilities and infrastructure.

Policy RM-5.5: **Energy Conservation.** Promote energy conservation and recycling by the public and private sectors.

Action RM-5a: Implement energy conservation measures in public buildings through the following actions:

a. Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and

b. Install energy saving devices in new public buildings and retrofit existing public buildings.

Action RM-5b: During the development review process, encourage innovative building design, layout, and orientation techniques to minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage, and solar design.

Action RM-5c: Continue to review development projects to ensure that all new public and private development complies with the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

Policy RM-6.1: **Conservation.** Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Policy RM-6.4: **Stormwater.** Work cooperatively with local water agencies to effectively and efficiently manage stormwater runoff as part of the City's multi-pronged water conservation strategy.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.2: **Fair Share.** Require that new development and major redevelopment provide for and fund its fair share of the costs for the expansion of public infrastructure and services, recreational amenities and facilities, and other public facilities.

Policy CF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.4: **Revenue Sources.** Identify and proactively pursue all available sources of revenue to meet public infrastructure and services, recreational amenities and facilities, and other public facilities needs.

Policy CF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy CF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy CF-1.9: **Cost Sharing.** Explore equitable methods for sharing the costs of facilities or services that serve multiple jurisdictions in the South Bay Cities Council of Governments and/or Los Angeles County.

Policy CF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy CF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action CF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action CF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy CF-2.1: **Water Supply Needs.** Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: **Use of Recycled Water.** Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: **Climate Change Impacts.** Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Policy CF-3.1: **Wastewater System.** Work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy CF-3.2: **Adequate Infrastructure.** Coordinate with the County of Los Angeles Consolidated Sewer Maintenance District to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained.

Policy CF-3.3: **Integrated Systems Planning.** Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

Action CF-3a: Through the development review process, continue to cooperate with the County of Los Angeles Consolidated Sewer Maintenance District to ensure adequate wastewater facilities are provided and maintained in the community. Specifically, the City should:

- Require that sufficient wastewater infrastructure capacity is available to serve the development prior to approval of the project;
- Ensure the project applicant has paid the required fees prior to occupancy of any new development; and
- Periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities.

Policy CF-4.1: **Maintain Capacity.** Encourage the Los Angeles County Flood Control District (LACFCD) to maintain sufficient levels of storm drainage service, improve flood control facilities and channel segments, and implement other best practices in order to protect the community from flood hazards.

Action CF-4d: Continue to review development projects to identify potential storm drain and drainage impacts and require developments to include measures to ensure that off-site runoff is not increased beyond pre-development levels during rain and flood events.

Action CF-4e: Project designs shall minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development (LID) strategies, and utilize Best Management Practices (BMPs) to reduce stormwater runoff.

Policy CF-5.1: **Cooperation with Utilities Providers.** Work cooperatively with utility providers to promote the provision of adequate telecommunications services and facilities to serve the needs of existing and future residents and businesses.

Action CF-5a: Confer with telecommunications providers regarding major development plans and participate in the planning of the extension of utilities.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

USS-2: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis: The General Plan Update is expected to result in increased population and employment growth within the Planning Area, and a corresponding increase in the demand for additional water supplies.

As described in Section 3.0, and summarized in Table 3-4, buildout under the General Plan Update could yield a total of 15,405 housing units, a population of 47,430 people, 5,351,026 square feet of non-residential building square footage, and 9,208 jobs within the Planning Area. This represents development growth over existing conditions of an additional 3,942 housing units, an additional population of 9,482 people, an additional 808,000 square feet of non-residential building square footage, and an additional 2,738 jobs within the Planning Area.

As discussed above, water service in the Planning Area is provided by the GSWC. GSWC's 2020 UWMP indicates that GSWC can meet projected water demands under normal-, single dry-, and multiple dry-year conditions through 2045. However, the General Plan Update is expected to result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies, which have not been accounted for in the UWMP. The General Plan Update would result in a water demand of approximately 8.0 AFY within the Planning Area, which would be a net increase of 1.6 AFY (25 percent) over existing conditions.

As discussed, the California Urban Water Management Planning Act requires water suppliers to prepare an UWMP every five years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. Current (2020) population used in the UWMP is determined utilizing the DWR Population Tool. However, as noted in the UWMP, the current DWR Population Tool does not contain 2020 census data, and therefore the values may change once the data is available. Additionally, conditions that may have been altered by the pandemic could result in changes. According to the UWMP, projected population is based on the current estimated population (using the DWR Population Tool) and projected growth from the Southern California Association of Governments (SCAG) (2020). The UWMP assumes SCAG's growth rate to be constant throughout the planning period until 2045.

As discussed in Section 5.12, *Population and Housing*, SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Lawndale could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. One of the objectives of the

proposed Project is to accommodate the City's 2021-2029 RHNA; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts. Therefore, future updates to the UWMP will account for future residential growth associated with the City's 2021-2029 RHNA and the additional residential and non-residential growth opportunities provided by Project implementation, and would identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years.

As site-specific development is not currently proposed, there is the potential that for future qualifying projects, a Water Supply Assessment would be required pursuant to SB 610. The Water Supply Assessment discerns whether the expected demand from the development being proposed has been accounted for in the forecasted demands in the most recent UWMP. A Written Verification of Supply per SB 221 is prepared as a condition of approval for a subdivision map of 500 units or more. Considered a fail-safe mechanism to provide sufficient evidence that adequate water supplies are available before construction begins, the Written Verification of Supply is also prepared/adopted by the water supplier and approved by the land use authority. Depending on the project, one or both of these analyses may be required. Development proposals that may not warrant a Water Supply Assessment and/or Written Verification of Supply, but meet the definition of a project under CEQA, would still require an analysis of sufficient water supplies in the CEQA process. The Lawndale Municipal Code includes several provisions related to water conservation, including: Chapter 8.40, *Water Conservation*, which allows the City Council to declare voluntary and mandatory water restrictions, as appropriate to water supply conditions; Chapter 15.28, *Green Building Standards Code*, which adopts CALGreen's regulations to improve water efficiency and conservation; and Chapter 17.88, *Water Efficient Landscape*, which promotes water-efficient landscaping in new and substantially altered or expanded existing development projects.

Additionally, the General Plan Update includes goals, policies, and actions directed towards water conservation to ensure that adequate water supply, treatment, and distribution capacity is available to meet the needs of future development without negatively impacting the existing community. These actions would result in reduced water consumption on a per capita basis that would help offset the increased demand from additional development within the Planning Area. Proposed Resource Management Element Policy RM-6.1 promotes water conservation strategies using innovative strategies and contemporary best practices. Policy RM-6.2 encourages all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation. Action RM-6b ensures City participation in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Action RM-6c directs the City to work with local water agencies and service providers to: implement groundwater recharge programs; participate in water conservation programs; establish water conservation education programs; require water efficient landscaping; expand the production and use of reclaimed water; and require water conservation devices in new development and rehabilitation projects. Proposed Community Facilities Element Policy CF-2.1 coordinates with local water districts when considering land use changes in order to assist the districts in planning for adequate

capacity to accommodate future growth. Policy CF-2.2 encourages the use and expansion of recycled water. Policy CF-2.3 considers the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands. Action CF-2a requires the development review process to ensure sufficient water supply and water infrastructure capacity is available to serve the proposed development prior to approval of the project. Action CF-2c directs the City to cooperate with the State, regional, and local water agencies and suppliers to participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Through implementation of existing Federal, State, and local regulations and the General Plan Update goals, policies, and actions, the environmental impacts to water supplies would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-6.1: **Conservation.** Promote residential, commercial and institutional water conservation strategies using multiple innovative strategies and contemporary best practices.

Policy RM-6.2: **Landscaping.** Encourage all public and private landscaping in new development and significantly altered redevelopment projects to be designed to reduce water demand, prevent erosion, decrease flooding, and reduce pollutants through the installation of irrigation systems, the selection of appropriate plant materials, and proper soil preparation.

Action RM-6b: In cooperation with the State, Regional and local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted. Cooperate with these agencies to establish standards and regulations for the use of recycled water in development projects.

Action RM-6c: Work with local water agencies and service providers, regional wholesalers, and private developers to encourage water conservation in the following ways:

- Implementing groundwater recharge programs;
- Participating in water conservation programs operated by the local and Regional water districts;
- Establishing water conservation education programs;
- Requiring Water-Efficient Landscaping for public and private areas, including parks and recreational facilities, in accordance with the Water-Efficient Landscape requirements;
- Expanding the production and use of reclaimed (recycled) water;
- Requiring the incorporation of water conservation devices, including low flush toilets, flow restriction devices, and water conserving appliances in both new public and private development projects and rehabilitation projects.

COMMUNITY FACILITIES ELEMENT

Policy CF-2.1: **Water Supply Needs.** Coordinate with local water districts when considering land use changes in order to assist the districts in planning for adequate capacity to accommodate future growth.

Policy CF-2.2: **Use of Recycled Water.** Encourage the use of recycled water in development projects and landscaping; implement best practices (e.g., dual plumbing) to expand recycled water use when safe, financially feasible, and available.

Policy CF-2.3: **Climate Change Impacts.** Consider the impacts of climate change in projections used to establish which water supply, distribution facilities, and conservation efforts are necessary to sustain future water demands.

Policy CF-2a: Through the development review process, require that sufficient water supply and water infrastructure capacity is available to serve the development prior to approval of the project, pursuant to Water Code Section 10910 and Government Code Section 66473.7.

Policy CF-2c: In cooperation with the State, Regional, and Local water agencies and suppliers, participate in programs that seek to expand the availability and use of recycled water for irrigation where feasible and legally permitted.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

USS-3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis: As discussed above, the City's local sewers discharge into the LACSD facilities and are conveyed for treatment at LACSD's JWPCP. The JWPCP has a capacity of 400 MGD and treats approximately 260 MGD of wastewater, resulting in a remaining capacity of 140 MGD. As shown in Table 5.19-5, LACSD projects an average flow of 423 MGD at the JWPCP for 2050, which exceeds the plant's current permitted capacity by 23 MGD. The LACSD continues to monitor and adjust its projected flows and would expand treatment capacity as needed based on these updates. No current plant expansion is being planned, as ongoing water conservation efforts throughout the region continue to lower current wastewater flows.

Based on the anticipated growth under the General Plan Update, as described in Section 3.0, and summarized in Table 3-4, buildout under the General Plan Update could yield a net change over existing conditions of an additional population of 9,482 people within the Planning Area. Using the wastewater generation rate of 83 gpcd from LACSD's 2012 Clearwater Program Master Facilities Plan, growth associated with implementation of the General Plan Update would generate 3.9 MGD of wastewater within the Planning Area, a net increase of 0.8 MGD (25.8 percent) over existing conditions.

As noted above, the General Plan Update enables additional development but does not include specific development proposals. At the time future projects are proposed, they would require a separate

environmental review and compliance with regulations in existence at that time to ensure adequate wastewater treatment capacity exists. LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand LACSD's wastewater services. Additionally, the General Plan Update includes goals, policies, and actions to ensure adequate wastewater facilities capacity to serve the Project's projected demand. Proposed Land Use Element Policy LU-2.6 would notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them. Proposed Community Facilities Element Policy CF-1.3 directs the City to maintain and implement public facility master plans, in collaboration with appropriate regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale. Policy CF-1.8 directs City participation in the preparation of plans and programs addressing regional infrastructure and public services issues. Action CF-1a directs City coordination with outside service providers and other agencies regarding their public facility plans and to provide local input on goals, objectives, and projects. Policy CF-1d requires any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities. Policy CF-3.1 directs the City to work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development. Policy CF-3.2 directs coordination with the CSMD to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained. Policy CF-3.3 proposes the City take a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy CF-3a directs the City to require that sufficient wastewater infrastructure capacity is available to serve proposed development prior to approval of the project; ensure the project applicant has paid the required fees prior to occupancy of any new development; and to periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities. The implementation of existing Federal, State, and local regulations and the General Plan Update policies and actions would ensure adequate wastewater treatment capacity and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

LAND USE ELEMENT

Action LU-1e: Initiate a coordinated process to regularly review and adjust population assumptions and forecasts in conjunction with the Department of Finance, Southern California Association of Governments (SCAG), and the County of Los Angeles in order to adequately plan for growth, including jobs-housing balance projections.

Policy LU-2.6: **Regional Growth.** Notify adjacent jurisdictions and agencies of proposed land use actions within the Planning Area that may affect them and take appropriate action to consider and respond to their concerns.

COMMUNITY FACILITIES ELEMENT

Goal CF-1: **Infrastructure and Public Services.** A community with adequate, reliable public and quasi-public infrastructure and services to support existing and future development.

Policy CF-1.1: **Capital Improvements.** Maintain and finance the capital improvement program to ensure the timely implementation of the General Plan and the adequate and efficient provision of public facility and municipal improvements.

Policy CF-1.3: **Public Facility Plans.** Maintain and implement public facility master plans, in collaboration with appropriate Regional, State, and Federal laws, to identify infrastructure needs, funding sources, and implement improvements for public facilities and services in Lawndale.

Policy CF-1.5: **Infrastructure Rehabilitation.** Regularly maintain and rehabilitate public facilities and critical infrastructure to extend its useful life; prioritize infrastructure improvements in areas targeted for near-term redevelopment and in areas designated as lower-income and/or disadvantaged communities.

Policy CF-1.8: **Regional Issues.** Continue to participate in the preparation of plans and programs addressing regional infrastructure and public services issues.

Policy CF-1.10: **Regional Services Providers.** Collaborate with the various regional facility and service providers to deliver high levels of service to Lawndale residents, and to plan for new development.

Policy CF-1.11: **Capital Improvement Planning.** Encourage agencies to carry out long-range capital improvement planning, which includes funding methods for the construction of projects that are compatible with regional land use planning goals and objectives.

Action CF-1a: Regularly coordinate with outside service providers and other agencies regarding their public facility plans and provide local input on goals, objectives, and projects.

Action CF-1b: Maintain records regarding the quality and status of public facilities and critical infrastructure and use this information to inform the capital improvement planning process.

Action CF-1c: Study mechanisms for funding and phasing of new infrastructure.

Action CF-1d: Require any new development or major redevelopment that would put local and/or regional facilities at or near capacity to upgrade those facilities.

Action CF-1e: Participate in regional and sub-regional planning forums that may address matters affecting the quality of life in Lawndale and the region.

Policy CF-3.1: **Wastewater System.** Work with appropriate service providers to promote safe and reliable wastewater collection and treatment infrastructure to serve existing and future development.

Policy CF-3.2: **Adequate Infrastructure.** Coordinate with the County of Los Angeles Consolidated Sewer Maintenance District to encourage facilities to provide sufficient capacity for Lawndale, and that wastewater infrastructure within the City is adequately monitored and maintained.

Policy CF-3.3: **Integrated Systems Planning.** Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

Action CF-3a: Through the development review process, continue to cooperate with the County of Los Angeles Consolidated Sewer Maintenance District to ensure adequate wastewater facilities are provided and maintained in the community. Specifically, the City should:

- Require that sufficient wastewater infrastructure capacity is available to serve the development prior to approval of the project;
- Ensure the project applicant has paid the required fees prior to occupancy of any new development; and
- Periodically review the fee schedules for sewer connections and revise fees as necessary to cover the cost of related services and facilities.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

USS-4: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Impact Analysis: Future development of projects as contemplated under the General Plan Update may increase the population within the Planning Area by an additional 9,482 people. As described above, the City has achieved a disposal rate of 2.1 PPD per resident in 2021. Assuming these disposal rates remain constant throughout the life of the General Plan Update, the new growth under General Plan buildout would result in a net increase of approximately 19,912.2 PPD of solid waste over existing conditions, which equals 9.6 net TPD or 3,634.0 net tons of solid waste per year.

The City's projected increase in solid waste generation associated with 2045 buildout under the General Plan Update is within the permitted capacity of the Olinda Alpha Landfill, Sunshine Canyon Landfill, and El Sobrante Landfill, where the vast majority of waste from the City was disposed of in 2019. Olinda Alpha Landfill has a remaining capacity of approximately 17.5 million cubic yards as of 2020, is permitted a maximum throughput of 8,000 TPD, and has enough projected capacity to serve residents and businesses until approximately 2036. Sunshine Canyon Landfill has a remaining capacity of approximately 77,900,000 cubic yards as of 2018, is permitted a maximum throughput of 12,100 TPD, and has enough projected capacity to serve residents and businesses until approximately 2037. El Sobrante Landfill has a remaining capacity of approximately 143,977,170 cubic yards as of 2018, is permitted a maximum throughput of

16,054 TPD, and has enough projected capacity to serve residents and businesses until approximately 2051, beyond the 20-year planning horizon of the General Plan Update. In addition, the City disposes solid waste to a number of other landfills and the Southeast Resource Recovery Facility. Conservatively assuming the Olinda Alpha Landfill and Sunshine Canyon Landfill reach full capacity during the 20-year planning horizon of the General Plan Update, the El Sobrante Landfill would have adequate capacity to accommodate the City's projected solid waste generation under buildout of 49.8 TPD. Further, it is more likely that future solid waste would be distributed to the other landfills serving the City.

In addition, all future development would be required to comply with the mandatory commercial and multifamily recycling requirements of AB 341, thus reducing the amount of landfill waste. Furthermore, the General Plan Update includes policies and actions to responsibly manage and reduce solid waste. Proposed Resource Management Element Policy RM-2.1 ensures compliance with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting. Policy RM-2.2 supports efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services in the City, and periodically reviews waste collection performance to verified adequacy of service. Policy RM-2.3 directs City participation in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and to ensure adequate landfill capacity in the region. Policy RM-2.5 directs the City to work with appropriate service providers to collect and compost green waste to distribute for use in parks, medians, and other municipal areas. Policy RM-2.6 directs the City to work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery. Policy RM-2.7 promotes Citywide educational programs related to recycling. Action RM-2a ensures solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan. Action RM-2c requires standard language is included in request for services and in City agreements requiring contractors to use BMPs to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates. Action RM-2e encourages recycling, reuse, and appropriate disposal of hazardous materials through increased participation in single-family and multi-family residential curbside recycling programs; increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and reduced yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

Through the implementation of existing regulations and the General Plan Update policies and actions, this is a less than significant impact.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.1: **Compliance with State Legislation.** Comply with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting.

Policy RM-2.2: **Solid Waste Collection.** Support efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services for present and future residents

and businesses, and periodically review waste collection performance to verified adequacy of service.

Policy RM-2.4: **Source Reduction and Recycling Efforts.** Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: **Organic Waste.** Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Policy RM-2.6: **Fees and Funding.** Work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery.

Policy RM-2.7: **Public Education.** Promote Citywide educational programs to inform residents of the benefits of recycling and appropriate recycling options and locations.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Action RM-2c: Include standard language in request for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates.

Action RM-2e: Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increased participation in single-family and multi-family residential curbside recycling programs;
- Increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and
- Reduce yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

USS-5: Would the Project comply with Federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: As discussed in the settings section, Chapter 8.32, *Solid Waste – Collection and Management*, of the Municipal Code establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. The City has also established disposal and mandatory recycling requirements for commercial facilities, single family residential, and multifamily residential premises to comply with State law diversion requirements. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Republic Services) to handle the City's solid waste and requires Republic to cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Republic and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by AB 939.

The General Plan Update includes policies and actions to responsibly manage and reduce solid waste in compliance with Federal, State, and local regulations. Proposed Resource Management Element Policy RM-2.1 ensures compliance with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting. Policy RM-2.2 supports efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services in the City, and periodically reviews waste collection performance to verified adequacy of service. Policy RM-2.3 directs City participation in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and to ensure adequate landfill capacity in the region. Policy RM-2.5 directs the City to work with appropriate service providers to collect and compost green waste to distribute for use in parks, medians, and other municipal areas. Policy RM-2.6 directs the City to work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery. Policy RM-2.7 promotes Citywide educational programs related to recycling. Action RM-2a ensures solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan. Action RM-2c requires standard language is included in request for services and in City agreements requiring contractors to use BMPs to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates. Action RM-2e encourages recycling, reuse, and appropriate disposal of hazardous materials through increased participation in single-family and multi-family residential curbside recycling programs; increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and reduced yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

Through the implementation of existing regulations and the General Plan Update policies and actions, future development implemented by the General Plan Update would continue to comply with management and reduction statutes and regulations related to solid waste and impacts would be less than significant.

Proposed General Plan Update Goals, Policies, and Actions:

RESOURCE MANAGEMENT ELEMENT

Policy RM-2.1: **Compliance with State Legislation.** Comply with local, Regional and State regulations regarding waste diversion, source reduction, recycling and composting.

Policy RM-2.2: **Solid Waste Collection.** Support efforts of the solid waste service provider to maintain adequate waste disposal, recycling and refuse services for present and future residents and businesses, and periodically review waste collection performance to verified adequacy of service.

Policy RM-2.4: **Source Reduction and Recycling Efforts.** Participate in source reduction and recycling techniques to reduce the amount of solid waste sent to landfills and ensure adequate landfill capacity in the region.

Policy RM-2.5: **Organic Waste.** Work with appropriate service providers to collect and compost green waste, including landscaping, Christmas trees, composting and mulch, and other sources of organic waste, to distribute for use in parks, medians, and other municipal areas.

Policy RM-2.6: **Fees and Funding.** Work with appropriate service providers to periodically review collection, recycling, and disposal fees to achieve State and Federal mandates, meet community expectations, and reflect cost efficiencies or increases for service delivery.

Policy RM-2.7: **Public Education.** Promote Citywide educational programs to inform residents of the benefits of recycling and appropriate recycling options and locations.

Action RM-2a: On an ongoing basis and in compliance with State law, ensure solid waste collection activities, facility siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal and education programs are consistent with the Los Angeles Countywide Integrated Waste Management Plan.

Action RM-2c: Include standard language in request for services and in City agreements requiring contractors to use best management practices to maximize diversion of waste from the landfill in order to meet the City's specified diversion rates.

Action RM-2e: Encourage recycling, reuse, and appropriate disposal of hazardous materials, including the following:

- Increased participation in single-family and multi-family residential curbside recycling programs;
- Increased participation in commercial and industrial recycling programs for paper, cardboard, and plastics; and
- Reduce yard and landscape waste through methods such as composting, grass recycling, and using resource efficient landscaping techniques.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant Impact.

5.19.6 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies the methodology used to determine the potential for cumulative growth and development to interact with the proposed Project to the extent that a significant cumulative effect relative to utilities and service systems may occur. The geographic setting for utilities and service systems considers development within the City as well as the service areas specific to water, wastewater conveyance and treatment, and solid waste, which serve the larger region.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, or have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis: As discussed, water service in the Planning Area is provided by the GSWC. In addition to the Project, cumulative projects within the City would receive water service from GSWC. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the GSWC. Additionally, Lawndale Municipal Code Section 3.14.090*, Water Users Tax*, imposes a tax on water users in the City and would help fund necessary infrastructure improvements. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded water facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Planning Area and would be required to pay applicable development impact fees to ensure water facilities can be constructed/expanded, if necessary. Further, the General Plan Update includes policies and actions related to the provision of utilities and water conservation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on water facilities to a less than significant level. Thus, the Project's incremental impacts to water facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Planning Area, and a corresponding increase in the demand for additional water supplies. Similar to future development associated with Project implementation, cumulative development projects would require an analysis of sufficient water supplies through provisions in SB 610 and/or the CEQA process. Additionally, future development associated with the Project and cumulative projects would be required to comply with existing Federal, State, and local regulations, including the Municipal Code, to conserve water and ensure the efficient use of available water supplies. Further, the General Plan Update includes policies and actions related to the provision of utilities and water conservation. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on water supplies to a less than significant level. Thus, the Project's incremental impacts to water supplies would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Impact Analysis: As discussed, the City and LACSD provide wastewater services to the Planning Area. In addition to the Project, cumulative projects within the City would be provided wastewater services by the City and LACSD. Similar to future development associated with Project implementation, cumulative development projects would be located within areas that are already developed and serviced by the City and LACSD. The City would review each site to determine if sufficient local and trunk sewer capacity exists to serve each specific development project. Pursuant to Lawndale Municipal Code Section 13.08.070, a building permit would not be issued if the anticipated sewage from a proposed project is found by the City Engineer to exceed the capacity available in the public sewer. Lawndale Municipal Code Chapter 13.08, *Sewer Capacity – Peak-flow Charges,* provides for sewer connection and facilities expansion fees for the City's local wastewater transmission lines. The specific impacts of providing new and expanded facilities cannot be determined at this time, as the Project does not propose or authorize development nor does it designate specific sites for new or expanded wastewater facilities. Cumulative development projects are anticipated to occur gradually as development occurs in the Planning Area and would be required to pay applicable development impact fees to ensure wastewater facilities can be constructed/expanded, if necessary, to ensure adequate capacity to serve the proposed development. Further, the General Plan Update includes policies and actions related to the provision of utilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on wastewater facilities to a less-than-significant level. Thus, the Project's incremental impacts to wastewater facilities would not be cumulatively considerable.

Project implementation may result in increased population growth in the Planning Area, and a corresponding increase in the flow of wastewater requiring treatment. As noted above, the Project enables additional development but does not include specific development proposals. At the time future projects are proposed, they would be required to ensure adequate wastewater treatment capacity exists. Additionally, LACSD charges annual wastewater sewer fees through its Wastewater Treatment Surcharge Program, as well as sewer connection fees through its Connection Fee Program, in order to maintain and expand wastewater services, including wastewater treatment. Thus, the Project's incremental impacts to wastewater would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: As discussed, storm drain infrastructure in the Planning Area is owned and operated by the City and the LACFCD. The Planning Area is primarily developed, with limited areas of pervious surfaces. Similar to the Project, cumulative projects have the potential to slightly increase impervious areas within specific areas of the Planning Area. However, due to the urbanized nature of the Planning Area, the majority of development activities associated with cumulative development would consist of infill and redevelopment on currently urbanized sites and would not substantially increase the rate or amount of surface runoff. Federal, State and local regulations would require individual projects to provide necessary on-site storm drain infrastructure and any off-site infrastructure improvements.

The specific impacts of providing new and expanded drainage facilities cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development under the proposed Project. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the Municipal Code, and other applicable regulations. Further, the General Plan Update includes policies and actions related to the provision of public facilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on stormwater facilities to a less than significant level. Thus, the Project's incremental impacts to stormwater would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, require or result in the relocation or construction of new or expanded electrical, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Impact Analysis: As discussed, the City is within the service areas of SCE, SoCalGas, and various telecommunication providers. The Planning Area is primarily developed and includes existing electrical, natural gas, and telecommunications infrastructure. Similar to the Project, cumulative projects have the potential to increase demand for electrical, natural gas, and telecommunications services, potentially resulting in the new construction or relocation of facilities. The specific impacts of providing new and

expanded electrical, natural gas, and telecommunications services cannot be determined at this time, as the Project does not propose or approve any specific development project nor does it designate specific sites for new or expanded public facilities. The environmental effects of future expansions of electrical, natural gas, and telecommunication facilities would be evaluated with each development proposal and would require a separate environmental review, as required, related to the construction and operation of new electrical, natural gas, and telecommunications infrastructure. Future development associated with the Project and cumulative projects would have to coordinate with each utility provider to establish service, provide any necessary extensions of facilities, and comply with regulations in existence at that time. As future development and cumulative development projects are considered by the City, each project would be evaluated for conformance with the Municipal Code, and other applicable regulations, including the General Plan Update. The General Plan Update includes policies and actions related to the provision of utilities. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on natural gas, electrical, and telecommunications facilities to a less than significant level. Thus, the Project's incremental impacts to electrical, natural gas, or telecommunications would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Would the project, combined with other related cumulative projects, generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and comply with Federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis: Similar to the Project, cumulative projects have the potential to increase solid waste generated within the Planning Area. As described above, the Lawndale Municipal Code, Chapter 8.28 establishes mandatory solid waste and recycling collection to comply with the requirements of AB 939 and AB 341. As permitted by AB 939, the City authorizes a private solid waste franchisee (i.e., Republic Services) to handle the City's solid waste and cooperate in the preparation of solid waste disposal characterization studies and the preparation of waste stream audits. Republic and the City work together to submit information to meet the reporting requirements of AB 939, or any other law or regulation, to reach the solid waste and recycling goals mandated by the AB 939. Future development associated with the Project and cumulative projects would be required to implement existing regulations, including the Municipal Code, to comply with regulations related to solid waste and ensure the permitted capacity of landfills serving the City is not exceeded. Further, the General Plan Update includes policies and actions related to solid waste, including source reduction. The polices and actions included within the General Plan Update and compliance with the Zoning Code would reduce the cumulative effect of the General Plan Update on solid waste to a less than significant level. Thus, the Project's incremental impacts to solid waste would not be cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.19.7 SIGNIFICANT UNAVOIDABLE IMPACTS

Impacts to utilities and service systems associated with the implementation of the General Plan Update would be less than significant. No significant unavoidable impacts to utilities and service systems would occur as a result of the General Plan Update.

5.19.8 REFERENCES

California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Disposal and Alternative Daily Cover (ADC) Tons by Facility*, https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility, accessed March 10, 2023a.

California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Activity Details: Olinda Alpha Landfill (30-AB-0035)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093, accessed March 10, 2023b.

California Department of Resources Recycling and Recovery (CalRecycle), *Sunshine Canyon City/County Landfill (19-AA-2000)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702, accessed March 10, 2023c.

California Department of Resources Recycling and Recovery (CalRecycle), *El Sobrante Landfill (33-AA-0217)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, accessed March 10, 2023d.

California Department of Resources Recycling and Recovery (CalRecycle), *Southeast Resource Recovery Facility (19-AK-0083)*, https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/1423, accessed June 19, 2023e.

California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Per Capita Disposal Trends*, https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports, accessed March 10, 2023f.

City of Lawndale, *Sewer System Management Plan*, 2014.

City of Lawndale, *Trash & Recycling*, https://www.lawndalecity.org/government/departments/public_works/trash%20&%20recycling, accessed March 10, 2023.

Golden State Water Company (GSWC), *Southwest Service Area 2020 Urban Water Management Plan*, July 2021.

Highspeedinternet.com, *Internet Providers in 90260*, https://www.highspeedinternet.com/ca/lawndale?zip=90260, accessed March 10, 2023.

Los Angeles County Department of Public Works (LACDPW), *Welcome to South Bay*, https://dpw.lacounty.gov/epd/swims/Residents/SOUTH_BAY.aspx, accessed March 10, 2023a.

Los Angeles County Department of Public Works (LACDPW), *Permanent Centers*, https://dpw.lacounty.gov/epd/hhw/Permanent, accessed March 10, 2023b.

Los Angeles County Flood Control District (LACFCD), *About the District*, https://pw.lacounty.gov/LACFCD/web/, accessed March 10, 2023.

Los Angeles County Sanitation Districts (LACSD), *Final Clearwater Program Master Facilities Plan*, November 2012.

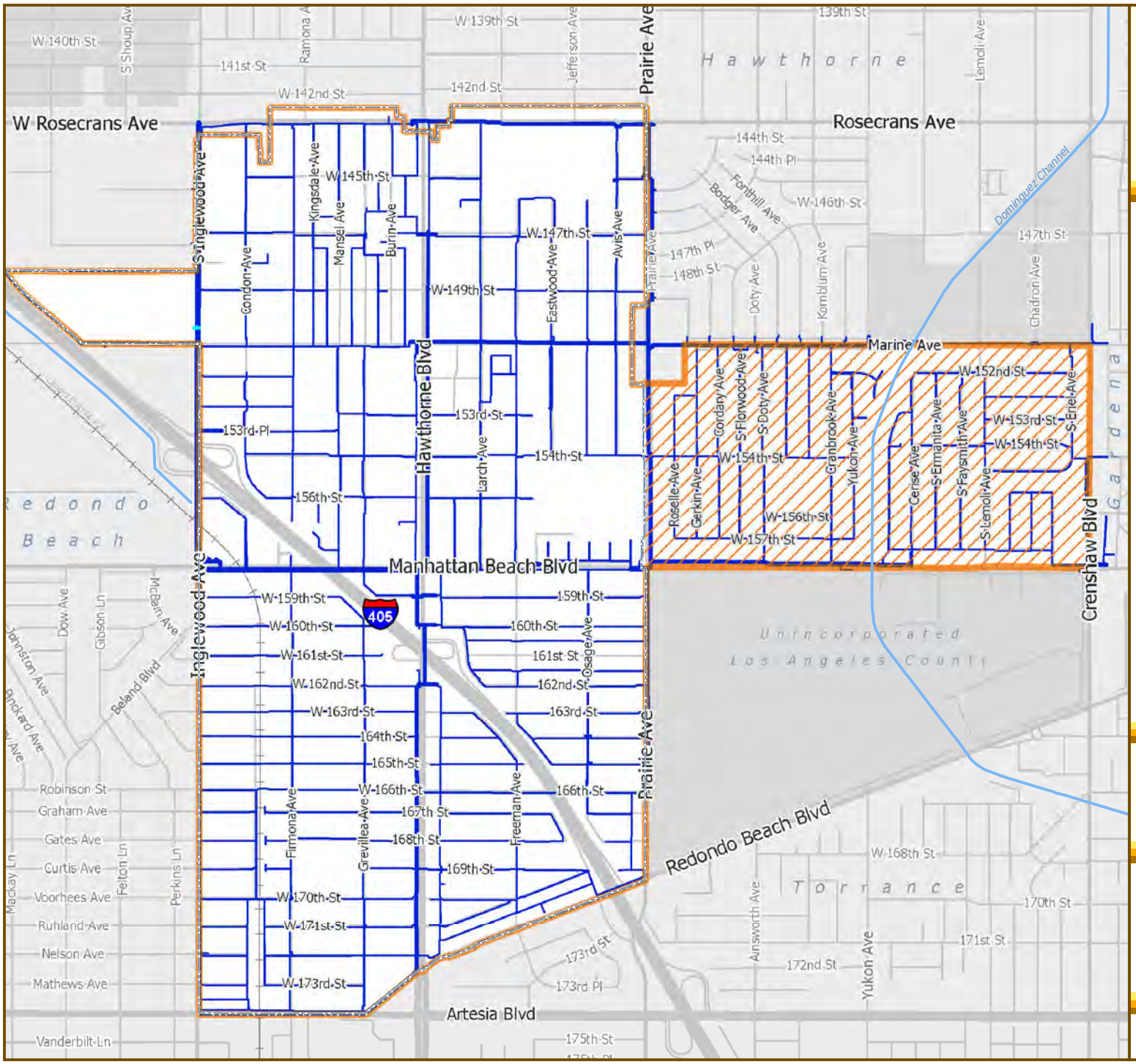
Los Angeles County Sanitation Districts (LACSD), *Southeast Resource Recovery Facility (SERRF) Brochure*, https://www.lacsd.org/services/solid-waste/facilities/southeast-resource-recovery-facility-serrf/southeast-resource-recovery-facility-serrf-brochure, accessed March 10, 2023.

Southern California Electric (SCE), *About Us*, https://www.sce.com/about-us, accessed March 9, 2023.

Southern California Gas Company (SoCalGas), *Company Profile*, https://www.socalgas.com/about-us/company-profile#:~:text=About%20SoCalGas%C2%AE,in%20more%20than%20500%20communities, accessed March 9, 2023.

West Yost Associates, *Background Report for Infrastructure Analysis for the City of Lawndale General Plan Update,* December 31, 2020.

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.19-1. Existing Water Infrastructure

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Unincoporated Los Angeles County

Golden State Water Company Pipelines

- 2-inch - 8-inch
- 10-inch - 16-inch

0 500 1,000
Feet

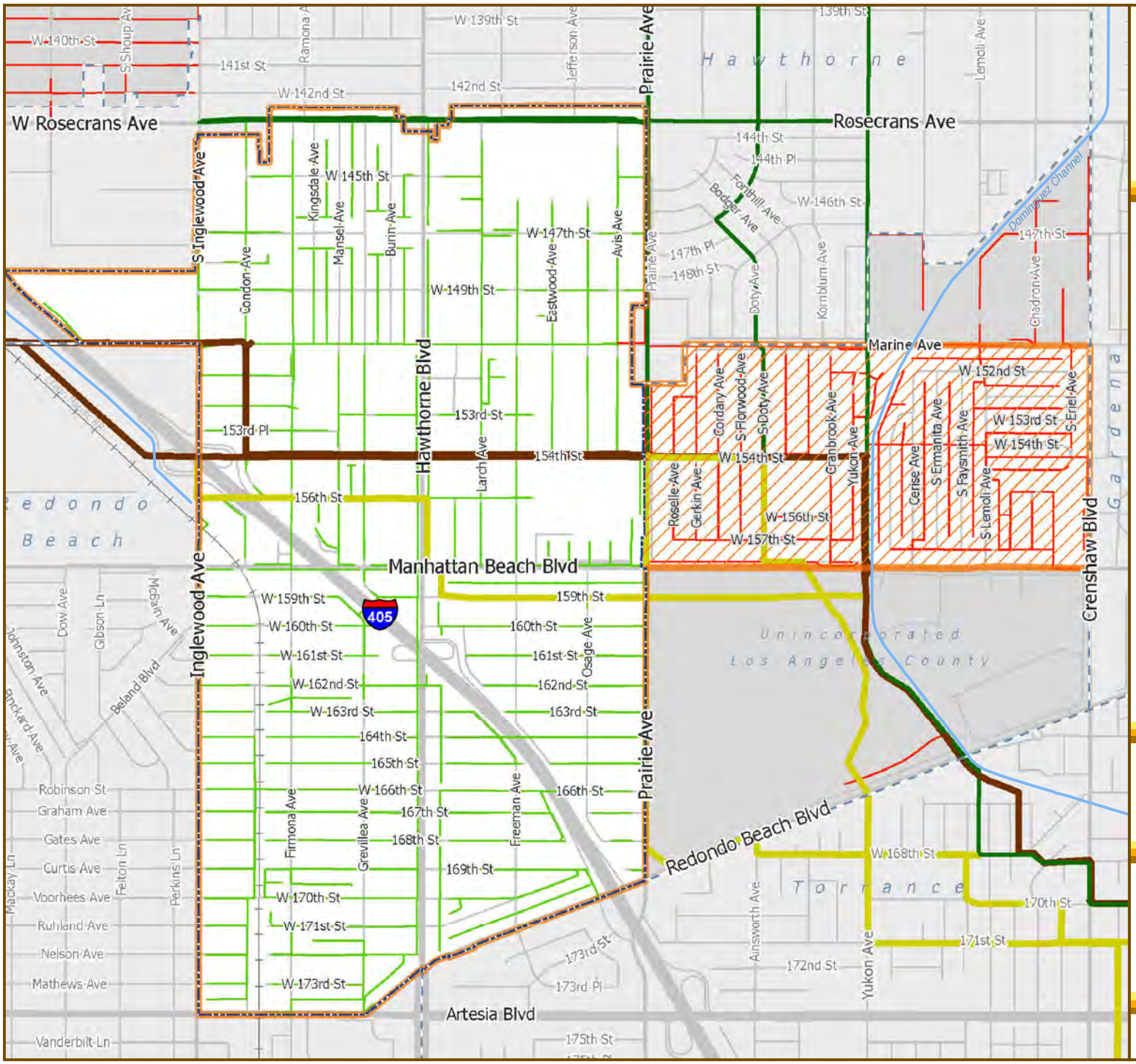
Sources: City of Lawndale; Los Angeles County; West Yost.
Date: June 27, 2023.

City of Lawndale
The heart of the South Bay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.19-2. Existing Sewer Infrastructure

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Unincoporated Los Angeles County

LACSD Conveyance System

- District Trunk Sewers
- JO A Trunk Line
- JO D Trunk Line

Collection Pipes

- City of Lawndale
- County of Los Angeles

0 500 1,000
Feet

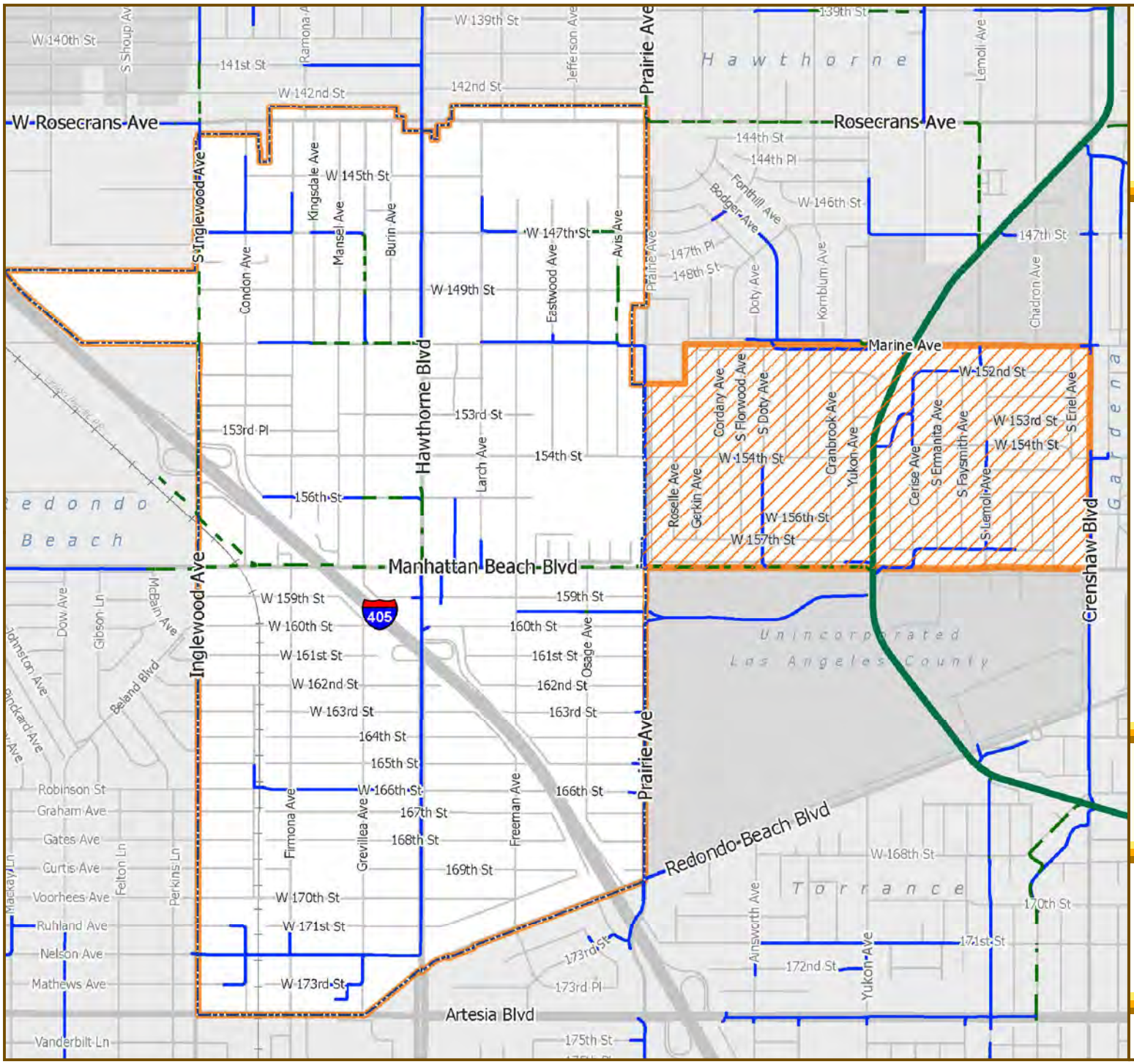
Sources: City of Lawndale; Los Angeles County; West Yost.
Date: June 27, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5.19-3. Existing Stormwater and Flood Control Facilities

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated Area
- Unincoporated Los Angeles County

LAFCD Conveyance Infrastructure

- Dominguez Channel

LAFCD Collection Infrastructure

- Reinforced Concrete Box (RCB)
- Reinforced Concrete Pipe (RCP)

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County; West Yost.
Date: June 27, 2023.

City of Lawndale
The heart of the South Bay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

5.20 WILDFIRE

This section analyzes potentially significant impacts related to wildfire that could result from implementation of the General Plan Update. Further discussion of fire suppression resources is located in Section 5.15, *Public Services*, of this EIR.

5.20.1 ENVIRONMENTAL SETTING

WILDFIRE HAZARDS

Threat from wildfire hazards is determined based on a number of factors, including fuel loading (vegetation); topography; climatic conditions, such as wind, humidity, and temperature; and the proximity of structures and urban development to fire hazards. Wildland fire hazards are most pronounced in Wildland-Urban Interface (WUI) areas and areas of development that are located within Fire Hazard Severity Zones (FHSZs). WUI areas typically contain higher amounts of vegetation that can serve as fuel for fires. Generally, the periods of greatest risk for wildland fire are the late summer and early fall when vegetation is at its driest. Human activity, including residential and agricultural burning, campfires, and the use of fireworks can all trigger fires. Natural causes such as lightning strikes may also start fires.

The State has charged the California Department of Forestry and Fire Protection (CAL FIRE) with the identification of FHSZ within State Responsibility Areas (SRA). In addition, CAL FIRE must recommend Very High Fire Hazard Severity Zones (VHFHSZ) identified within any Local Responsibility Areas (LRA). The FHSZ maps are used by the State Fire Marshall as a basis for the adoption of applicable building code standards and are meant to help limit wildfire damage to structures through planning, prevention, and the application of risk reduction measures. The mapped areas, or "zones," are based on factors such as fuel (e.g., flammable vegetation), slope, and fire weather. There are three zones, based on increasing fire hazard: moderate, high, and very high.

According to Los Angeles County's and CAL FIRE's FHSZ maps, the Planning Area is located within a LRA, and there are no FHSZs in an LRA or SRA within the Planning Area (Los Angeles County 2023; CAL FIRE 2023a).

IDENTIFYING FIRE HAZARDS

Fuel rank is a ranking system developed by CAL FIRE that incorporates four wildfire factors: fuel model, slope, ladder index, and crown index.

The U.S. Forest Service has developed a series of fuel models, which categorize fuels based on burn characteristics. These fuel models help predict fire behavior. In addition to fuel characteristics, slope is an important contributor to fire hazard levels. A surface ranking system has been developed by CAL FIRE, which incorporates the applicable fuel models and slope data. The model categorizes slope into six ranges: 0-10 percent, 11-25 percent, 26-40 percent, 41-55 percent, 56-75 percent, and greater than 75 percent. The combined fuel model and slope data are organized into three categories, referred to as surface rank. Thus, surface rank is a reflection of the quantity and burn characteristics of the fuels and the topography in a given area.

The ladder index is a reflection of the distance from the ground to the lowest leafy vegetation for tree and plant species. The crown index is a reflection of the quantity of leafy vegetation present within individual specimens of a given species. The surface rank, ladder index, and crown index for a given area are combined in order to establish a fuel rank of medium, high, or very high. Fuel rank is used by CAL FIRE to identify areas in the California Fire Plan where large, catastrophic fires are most likely.

The fuel rank data is used by CAL FIRE to delineate fire threat based on a system of ordinal ranking. Thus, the Fire Threat model creates discrete regions, which reflect fire probability and predicted fire behavior. The four classes of fire threat range from moderate to extreme.

HISTORY OF WILDFIRE

Lawndale adopted a Citywide Local Hazard Mitigation Plan (LHMP) in March 2016. As wildfires do not pose a major threat to the City, the LHMP does not include the topics of wildland and urban fires within the Natural Hazard Risk Assessment discussion. However, CAL FIRE records all known fires that occur annually and compiles them into the CAL FIRE Incident Database. The CAL FIRE Incident Database archives date back to 2013, but some of the larger fires have been recorded since the early 2000s. The larger (1,000 acres+) fires that have occurred within an approximately 35-mile radius in and around the Planning Area within the last ten years are shown in Table 5.20-1, *History of Fire in Lawndale and Surrounding Area*.

Table 5.20-1
History of Fire in Lawndale and Surrounding Area

Year	Fire Name, Location, & Description	Acres Burned	Containment
2014	Colby Fire; located near Morris Reservoir, north of Glendora. Active for nine days before containment. Approximately 32 miles northeast of Planning Area.	1,952	100%
2016	Sage Fire; off of Calgrove Blvd, southwest of Santa Clarita. Active for seven days. Approximately 35 miles north of Planning Area.	1,100	100%
2016	Marek Fire; incident located at Lake View Terrace. Active for one day before containment. Approximately 28 miles north of Planning Area.	4,824	100%
2017	La Tuna Fire; incident occurred at Lowell Ave and I-210, Verdugo Hills, in the City of Los Angeles. Active from September 1, 2017 to January 9, 2018. Approximately 22 miles north of Planning Area.	7,194	100%
2017	Creek Fire; located at Kagel Canyon Rd, north of Lake View terrace. Active from December 5, 2017 to August 6, 2018. Approximately 28 miles north of Planning Area.	15,619	100%
2019	Saddle Ridge Fire; located on Saddle Ridge Road, Sylmar. Active for 21 days in October of 2019 before containment. Approximately 30 miles north of Planning Area.	8,799	100%
2020	Ranch 2 Fire; North San Gabriel Canyon Road and Ranch Road, San Gabriel Canyon. Active from August 13 to October 5. Approximately 30 miles northeast of Planning Area.	4,237	100%
2021	Palisades Fire; located at Palisades Court and Michael Lane, Topanga Canyon. Active for 12 days before containment. Approximately 16 miles northwest of Planning Area.	1,202	100%

Source: California Department of Forestry and Fire Protection (CAL FIRE), *Incident Data 3/9/23*, https://www.fire.ca.gov/incidents , accessed March 9, 2023b.

WILDFIRE PREPAREDNESS & PROGRAMS

Due to the urbanized character of the City, fires would primarily be associated with structures, trash/debris, and vehicle fires. Structure fires, including homes, industrial and commercial buildings, and other facilities are of the greatest concern due to the potential for loss of life as well as property. Generally, the risk of injury and damage is greater for higher occupancy structures, such as condominiums, apartment buildings, hotels, and churches. In addition, higher density areas are of increased concern due to the large number of people residing within a concentrated area and the potential for fires to spread from one structure to another. Lawndale is among the highest density areas within Los Angeles County. Development of the City has resulted in small lot development with multiple structures on single lots and narrow streets. As discussed above, the Planning Area, does not contain VHFHSZs within SRAs and LRAs.

The City of Lawndale contracts with the Los Angeles County Fire Department (LACoFD) for fire and emergency services. The LACoFD contracts with CAL FIRE for provision of services as part of an integrated fire protection system. There is one fire station within City limits: Fire Station 21, located at 4312 West 147th Street.

LACoFD's areas of expertise include: Firefighting; Emergency Medical Services; Urban Search and Rescue, and Hazardous Materials; Air and Wildland; Lifeguarding; Dispatch; Prevention; and Public Education. The Air and Wildland Department maintains a fleet of ten helicopters for paramedic transport, hoist rescues and wildland firefighting. Contract aircraft are also available during wildfire season. Nine camps are also staffed year-round for fire suppression, fire road maintenance and miscellaneous projects. The Prevention Department educates the community about the benefits of proper safety practices and identifies and eliminates all types of hazardous conditions that pose a threat to life, the environment and property (Los Angeles County Fire Department 2023).

The LACoFD Strategic Plan 2017- 2021 outlines goals and strategies for fire protection services throughout the Los Angeles County Operational Area, including facility needs and improvements, training requirements, and disaster preparedness.

Further, LACoFD supports the "Ready Set, Go!" (RSG) CAL FIRE State program. This program is a preparedness campaign that gives Los Angeles County residents tips on how to be prepared for wildfires (and floods) year-round. It is an easy-to-understand guide for how to make a home resistant to wildfires as well as preparing families to leave early and safely. The publication was prepared by the International Association of Fire Chief's RSG Program and the U.S. Department of Agriculture, U.S. Forest Service, U.S. Department of the Interior, and the U.S. Fire Administration.

5.20.2 REGULATORY SETTING

FEDERAL

FY 2001 Appropriations Act

Title IV of the Appropriations Act required the identification of "Urban Wildland Interface Communities in the Vicinity of Federal Lands that are at High Risk from Wildfire" by the U.S. Departments of the Interior and Agriculture.

Disaster Mitigation Act

The Disaster Mitigation Act of 2000 requires that a state mitigation plan, as a condition of disaster assistance, add incentives for increased coordination and integration of mitigation activities at the state level through the establishment of requirements for two different levels of state plans: "Standard" and "Enhanced." The Disaster Mitigation Act also established a new requirement for local mitigation plans.

National Cohesive Wildland Fire Management Strategy

Under the direction of the Federal Land Assistance, Management, and Enhancement Act of 2009 (the FLAME Act), the Secretary of the Interior and the Secretary of Agriculture created the National Cohesive Wildland Fire Management Strategy report. This report contains a cohesive wildfire management strategy as directed by the FLAME Act and under the advisement of the intergovernmental Wildland Fire Leadership Council. The most recent version of this report is The National Strategy: The Final Phase in the Development of the National Cohesive Wildland Fire Management Strategy (2014).

National Fire Plan (NFP) 2000

The summer of 2000 marked a historic milestone in wildland fire records for the United States. Dry conditions (across the western United States), led to destructive wildfire events on an estimated 7.2 million acres, nearly double the 10-year average. Costs in damages, including fire suppression activities, were approximately 2.1 billion dollars. Congressional direction called for substantial new appropriations for wildland fire management. This resulted in action plans, interagency strategies, and the Western Governor's Association's "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment - A 10-Year Comprehensive Strategy - Implementation Plan", which collectively became known as the National Fire Plan. This plan places a priority on collaborative work within communities to reduce their risk from large-scale wildfires.

Healthy Forest Initiative 2002/Healthy Forest Restoration Act 2003

In August 2002, the Healthy Forests Initiative was launched with the intent to reduce the severe wildfires risks that threaten people, communities, and the environment. Congress then passed the Healthy Forests Restoration Act on December 3, 2003 to provide the additional administrative tools needed to implement the Healthy Forests Initiative. The Healthy Forests Restoration Act strengthened efforts to restore healthy forest conditions near communities by authorizing measures such as expedited environmental assessments for hazardous fuels projects on Federal land. This Act emphasized the need for Federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects and places priority on fuel treatments identified by communities themselves in their Community Wildfire Protection Plans.

Department of the Interior Department Manual Part 620

Wildland Fire Management Part 620 of the Department of the Interior Departmental Manual pertains to wildland fire management policies, with the goal of providing an integrated approach to wildland fire management. The guiding principles of the plan emphasize the need for public health and safety considerations, risk management protocols, inter-agency collaboration, and economic feasibility of wildfire management practices, as well as the ecological role of wildfires.

STATE

California Department of Forestry and Fire Protection (CAL FIRE)

Under Title 14 of the Natural Resources of the California Code of Regulations (CCR), CAL FIRE has the primary responsibility for implementing wildfire planning and protection for SRA lands. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within the SRA. The CAL FIRE Resource Management Program manages more than 31 million acres of California's privately-owned wildlands, and provides emergency services in 36 of the State's 58 counties via contracts with local governments.

Under CCR Title 24, *Regulations Development*, the Office of the State Fire Marshal is responsible for promulgating regulations that promote fire and life safety for inclusion into the State Building Codes, including the California Building Code, California Fire Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Historical Building Code. The process incorporates a great deal of public participation and is guided by the State Building Standards Law.

Strategic Fire Plan for California

The State Board of Forestry and Fire Protection, along with CAL FIRE, updated the previous 2010 Strategic Fire Plan to reflect current and anticipated needs by incorporating and updating goals and objectives to reflect new priorities and changed conditions. The 2018 Strategic Fire Plan focuses on 1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and 2) natural resource management to maintain the state's forests as a carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. It serves as guidance for CAL FIRE and stakeholders who share similar missions and responsibilities towards public safety and fire suppression.

California Fire Code

The 2022 California Fire Code (CCR Title 24, Part 9) establishes regulations to safeguard against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety for and assistance to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and WUI areas.

California State Multi-Hazard Mitigation Plan

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural- and human-caused hazards in California. The SHMP provides guidance for hazard mitigation activities emphasizing partnerships among local, State, and Federal agencies as well as the private sector.

California Government Code

California Government Code Section 65302.5 requires the State Board of Forestry and Fire Protection to provide recommendations to a local jurisdiction's General Plan fire safety element at the time that the General Plan is amended. While not a direct and binding fire prevention requirement for individuals, General Plans that adopt the Board's recommendations will include goals and policies that provide for contemporary fire prevention standards for the jurisdiction.

California Government Code Section 51175 defines Very High Fire Hazard Severity Zones and designates lands considered by the State to be a very high fire hazard.

California Government Code Section 51182 specifically requires people who own, lease, control, operate, or maintain a building or structure on or adjoining land within a VHFHSZ, to do all of the following: (A) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, (B) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe, (C) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood, (D) Maintain the roof of a structure free of leaves, needles, or other vegetative materials, and (E) Prior to constructing a new dwelling or structure that will be occupied or rebuilding an occupied dwelling or occupied structure damaged by a fire in that zone, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards.

California Government Code Section 51189 directs the Office of the State Fire Marshal to create building standards for wildland fire resistance. The code includes measures that increase the likelihood of a structure withstanding intrusion by fire (such as building design and construction requirements that use fire-resistant building materials) and provides protection of structure projections (such as porches, decks, balconies and eaves), and structure openings (such as attics, eave vents, and windows).

California Public Resources Code

The State's Fire Safe Regulations are set forth in Public Resources Code Section 4290, which include the establishment of SRAs.

Public Resources Code Section 4291 sets forth defensible space requirements, which are applicable to anyone that owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush covered lands, grass-covered lands, or land that is covered with flammable material (Section 4291(a)).

Public Resources Code Sections 4292-4296 and 14 CCR 1256, Fire Prevention for Electrical Utilities, address the vegetation clearance standards for electrical utilities. They include the standards for clearing around energy lines and conductors such as power-line hardware and power poles. These regulations are critical to wildland fire safety because of the substantial number of power lines in wildlands, the historic source of fire ignitions associated with power lines, and the extensive damage that results from power line caused wildfires in severe wind conditions.

Assembly Bill 337

Per AB 337, local fire prevention authorities and CAL FIRE are required to identify VHFHSZs in LRAs. Standards related to brush clearance and the use of fire-resistant materials in fire hazard severity zones are also established.

California Code of Regulations Title 8

In accordance with CCR Title 8, Sections 1270 and 6773 (Fire Prevention and Fire Protection and Fire Equipment), the Occupational Safety and Health Administration (Cal OSHA) establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

California Code of Regulations Title 14 (Natural Resources)

Division 1.5 (Department of Forestry and Fire Protection), Title 14 of the CCR establishes a variety of wildfire preparedness, prevention, and response regulations.

California Code of Regulations Title 19 (Public Safety)

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention, and construction and construction materials standards.

California Code of Regulations Title 24 (California Building Code)

The California Building Code (CBC) contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment.

California Health and Safety Code and Uniform Building Code Section 13000 et seq.

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which is divided into “Fires and Fire Protection” and “Buildings Used by the Public.” The regulations provide for the enforcement of the UBC and mandate the abatement of fire hazards.

The code establishes broadly applicable regulations, such as standards for buildings and fire protection devices, in addition to regulations for specific land uses, such as childcare facilities and high-rise structures.

California Senate Bill 1241

California Senate Bill 1241 requires that the Safety Element component of city or county general plans to incorporate fire risk related to SRAs and VHFSZ.

LOCAL

Los Angeles County Operational Area Emergency Response Plan

The purpose of the Los Angeles County Operational Area Emergency Response Plan (OAERP) is to increase cooperation and coordination between relevant governmental agencies and jurisdictions in order to

increase efficiency and minimize losses in the event of an emergency or disaster. The OAERP established the Operational Area (OA) emergency organization, identifies departmental responsibilities, and specifies policies and general procedures for addressing emergencies impacting the OA. This Plan provides for the coordination of emergency operations plans of agencies and jurisdictions. The OAERP conforms to the requirements of the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS).

County of Los Angeles All-Hazards Mitigation Plan

The 2020 All-Hazards Mitigation Plan (AHMP) assess risks posed by natural hazards and to develop a mitigation action plan for reducing the risks in Los Angeles County. The primary focus of the 2020 AHMP is preparation for natural hazards and secondary hazards, that follow as a result of a natural hazard. In addition, potential climate change impacts are addressed in the plan as increasing surface temperatures will likely result in more droughts and subsequently the risk of wildfires. Therefore, climate change, dam failure, drought, earthquake, flood, landslide, tsunami, and wildfire are the main focuses in the 2020 AHMP. The County developed the 2020 AHMP to cover mitigation responsibilities of County departments (including LACoFD). It helps ensure the most effective allocation of resources for the maximum benefit and protection of the public in time of emergency.

City of Lawndale Local Hazard Mitigation Plan 2016

The City of Lawndale developed the 2016 Local Hazard Mitigation Plan (LHMP) in an effort to reduce future loss of life and property resulting from natural disasters and to provide increased resiliency for the City, allowing Lawndale to return to “the norm” sooner, with fewer impacts to people and infrastructure. The purpose of the Lawndale LHMP is to provide the City with a blueprint for hazard mitigation action planning. The plan identifies resources, information, and strategies for risk reduction, and provides a tool to measure the success of mitigation implementation on a continual basis.

City of Lawndale Emergency Operations Plan (EOP)

The City adopted the EOP in 2011, which was updated in 2015. The EOP addresses the City’s planned response to natural or human-caused disasters, provides an overview of operational concepts, and identifies components of the City’s emergency/disaster management organization within the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS) and the Incident Command System (ICS). The EOP also describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support.

City of Lawndale Municipal Code

Chapter 2.44, *Disaster Council*, provides for the preparation and carrying out of plans for the protection of people and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organizations and affected private persons. The intent of this Chapter is to develop emergency and mutual-aid plans and agreements.

Municipal Code Title 13, *Public Services*, addresses wastewater and storm drains within the City. Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, establishes stormwater runoff controls and best management practices (BMPs) to prevent and/or reduce the quantity of pollutants from being discharged

into the municipal stormwater system (MS4). Section 13.12.060, *Best Management Practices Required*, requires the implementation of BMPs during project operation. Section 13.12.070, *Construction Activity Stormwater Measures*, requires applicants for grading or building permits within the City to provide satisfactory proof of compliance with the Construction General Permit, including a Stormwater Pollution Prevention Plan (SWPPP), when applicable. Applicants that are not required to comply with the Construction General Permit are required to implement a grading and construction activity runoff control program. Chapter 3.16, *Standard Urban Stormwater Mitigation Plan and Low Impact Development Implementation*, contains a number of requirements to control stormwater pollution. Subject new development and redevelopment projects are required to comply with standard urban stormwater mitigation program (SUSMP) conditions assigned by the City, consisting of low impact development (LID) structural and non-structural BMPs, source control BMPs; and structural and non-structural BMPs for specific types of uses. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Per Section 13.16.110, *Maintenance of Best Management Practices*, applicants for new subject development and redevelopment projects must agree to maintain any structural or treatment control BMPs.

Municipal Code Chapter 15.20, *Fire Code*, adopts and incorporates the California Fire Code, as amended by Title 32 the Los Angeles County Fire Code, as the City's fire code prescribing regulations governing the creation and maintenance of conditions dangerous to life and property due to hazards of fire and explosions. The Fire Code sets fire safety related building standards and practices to safeguard life and property.

Section 17.36.220, *Temporary Storage of Construction Materials*, and Section 17.36.230, *Temporary Storage- City Construction Materials and Other Public Agency Construction Materials*, regulate construction materials and equipment. Particularly, Section 17.36.220 requires construction activities to keep adjacent sidewalks, public streets, and, alleys, to be kept free of trash, dirt, debris, or other material for the duration of the construction, as well as sixty days following substantial completion of such construction. Section 17.36.230 allows property in any zone to be used for the storage of materials, equipment and/or for a contractor's temporary office for any city construction project and/or other public agency construction projects.

5.20.3 SIGNIFICANCE CRITERIA AND THRESHOLDS

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist, which includes questions related to wildfire. The issues presented in the Initial Study Environmental Checklist, which have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and if it would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan (refer to Impact Statement WF-1);
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire (refer to Impact Statement WF-2);

- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment (refer to Impact Statement WF-3); and/or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes (refer to Impact Statement WF-4).

5.20.4 IMPACT ANALYSIS AND MITIGATION MEASURES

WF-1: Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: According to the CAL FIRE and County FHSZ Maps, the Planning Area is not located within an SRA or within a VHFHSZ within a LRA (CAL FIRE 2023a; Los Angeles County 2015). Therefore, although the General Plan Update would allow for a variety of new development within the Planning Area, no future development within the Planning Area would be located within a FHSZ in SRA or LRA. Any future development would be required to comply with all City and LACoFD requirements for fire prevention and safety measures, including site access. Additionally, implementation of the General Plan Update would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. As described in Section 5.15, *Public Services*, LACoFD provides fire and emergency response service to the City of Lawndale. The County OAERP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Los Angeles County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. The EOP does not provide a specific evacuation route map, as evacuation measures would be implemented based on the specific emergency and area affected. The General Plan Update would not require or result in revisions to the adopted OAERP or EOP.

While the Project does not propose site-specific development, infrastructure improvements would occur gradually to accommodate the new growth as further discussed in Section 5.17, *Transportation*. Future development would be designed, constructed, and maintained in accordance with applicable standards, including vehicular access to ensure that adequate emergency access and evacuation would be maintained. Pursuant to Municipal Code Chapter 15.20, *Fire Code*, construction activities that may temporarily restrict fire apparatus access would be required to implement appropriate measures to facilitate the passage of fire apparatus and emergency vehicles through/around any effected roadways, as part of the building permit process. The General Plan Update identifies major arterials as the primary routes for evacuation; however, evacuation routes would depend upon the emergency event and area affected. Law enforcement will identify the appropriate routes and assist residents leaving the City in the event an evacuation of all or part of the City is required.

Future development within the Planning Area is not anticipated to result in the substantial modification of roadways surrounding specific development sites or the placement of any permanent physical barriers on adjacent roadways. There is the potential that traffic lanes located immediately adjacent to a

development site may be temporarily closed or controlled by construction personnel during construction activities. However, any temporary construction activity would adhere to Municipal Code Section 17.36.220, *Temporary Storage of Construction Materials*, which requires sidewalks, public streets, and, alleys adjacent to construction sites to be kept free of debris or other materials that could interfere with circulation for the duration of construction activities, as well as sixty days following substantial completion of such construction. Thus, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

The General Plan Update includes policies and actions to address public safety and emergency evacuation. Proposed Public Safety Element Goal PS-1, and subsequent policies and actions, pertains to emergency operations. Policy PS-1.3 implements emergency preparedness and response measures in coordination with the County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses. Policy PS-1.4 requires the Lawndale Local Hazard Mitigation Plan to be regularly maintained and updated. Policy PS-1.6 seeks opportunities to improve emergency access and circulation throughout the community. Action PS-1a reviews County and State emergency response procedures that must be coordinated with City procedures. Action PS-1b continues to implement and update (when relevant) the City's EOP. Policy PS-4.2 continues involvement of the LACoFD in the development review process to ensure fire safety is addressed in new and modified developments. Policy PS-4.3 ensures all new development provides adequate access for emergency vehicles and evacuation. With adherence to Municipal Code regulations and General Plan Update policies, implementation of the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan and no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Emergency Operations.** A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.2: **Critical Facilities**. Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.3: **Emergency Preparedness and Response**. Continue to implement emergency preparedness and response measures in coordination with Los Angeles County including periodic trainings with staff and/or participation in County trainings on emergency operations procedures and responses.

Policy PS-1.4: **Local Hazard Mitigation**. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.6: **Emergency Access**. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Action PS-1a: Regularly review County and State emergency response procedures that must be coordinated with City procedures.

Action PS-1b: Continue to implement and update (when relevant) the City's Emergency Operations Plan.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.3: **Emergency Access**. Require all new developments provide adequate access for emergency vehicles and evacuation as part of the development review process.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

WF-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: The Planning Area does not contain lands classified as FHSZs, nor is the Planning Area located within an SRA. The Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas.

The Project would allow for a variety of new development within the Planning Area, but does not propose any site-specific development. Implementation of the General Plan Update would not substantially alter the slope, prevailing winds, or other factors that would increase exposure Lawndale residents, employees or visitors to increased pollutant concentrations from wildfire or result in the uncontrollable spread of a wildfire. Future development is not anticipated to exacerbate wildfire risks. The General Plan Update includes policies and actions to address public safety and emergency services, including fire protection services. Proposed Public Safety Element Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Action PS-4a requires all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City. Therefore, with implementation of the applicable General Plan Update goals, policies and actions, and compliance with fire codes, no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Policy PS-1.4: **Local Hazard Mitigation**. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.6: **Emergency Access**. Investigate and seek out opportunities to improve emergency access and circulation throughout the community.

Goal PS-4: **Fire Hazards.** A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: **Fire Protection Services**. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4: **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Action PS-4b: Work with LACoFD to disseminate educational programs for residents on fire hazard risks and fire safety measures.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis: The City is highly urbanized and existing infrastructure generally exists within the Planning Area. While no site-specific development is currently proposed, future development anticipated by the General Plan Update could require the eventual construction and installation of new infrastructure or maintenance of existing infrastructure, including roads, water and sewer, and power lines to serve increased growth and development. The Planning Area does not contain lands classified as FHSZs, nor is the Planning Area located within an SRA.

The General Plan Update includes provisions for emergency access, fire protection services, and fire safe design site standards. Proposed Public Safety Element Policy PS-1.2 directs coordination with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2

involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Future development of utility infrastructure would be subject to the requirements established in Public Resources Code Section 4292, which requires clearing of flammable fuels for a minimum 10-foot radius from the outer circumference of poles and towers; and Section 4293, which sets basic requirements for clearances around electrical conductors. Furthermore, future development would be required to meet vegetation clearance requirements outlined in Title 14, Section 1104.1(d) of the California Code of Regulations for single overhead facilities.

Maintenance of existing infrastructure and the potential installation of new infrastructure for future projects in the Planning Area would be required to comply with Fire Code requirements found in the Municipal Code (Chapter 15.20, *Fire Code*). Proposed development would be reviewed by the LACoFD to determine the specific fire requirements applicable to ensure compliance with the Fire Code. The potential for future projects to impact environmental resources to meet compliance with fire development standards such (as fuel breaks and clearance requirements) would require site specific environmental evaluation under CEQA to identify any site-specific impacts. In addition, any development in the City would need to comply with the California Building Code, Public Resource Code, and the City Municipal Code to ensure that new developments have access to necessary utilities, and any additional utility construction complies with all code requirements.

As demonstrated throughout this EIR, implementation of the various policies and actions contained in the General Plan Update would reduce potential impacts associated with the construction and expansion of infrastructure. Implementation of the General Plan Update policies and actions, combined with local and State requirements, would ensure that potential wildland fire hazards would not be exacerbated by the installation or maintenance of local infrastructure, and no impact would occur.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Policy PS-1.2 **Critical Facilities.** Coordinate with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Policy PS-1.4: **Local Hazard Mitigation**. Regularly maintain and update natural and man-made hazard information relevant to the Lawndale Local Hazard Mitigation Plan.

Policy PS-1.5: **Resources.** Support policies and programs that facilitate the availability of adequate resources to respond to health, fire, and police emergencies.

Goal 4: **Fire Hazards.** A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: **Fire Protection Services**. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Policy PS-4.4 **Building Fire Codes.** Require that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

WF-4: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis: Wildfire can alter the hydrologic response of a watershed to the extent that even modest rainstorms can produce dangerous flash floods and debris flows (United States Geological Survey 2021). A number of factors affect the likelihood of downstream flooding or landslide after a fire including basin morphometry, burn severity, soil properties, and rainfall characteristics.

The General Plan Update would allow development and improvement projects that would involve some land clearing, grading, and other ground-disturbing activities that could temporarily increase soil erosion rates during and shortly after project construction. There are no designated FHSZs within the Planning Area. Additionally, the Planning Area is predominantly flat, built-out, and surrounded by highly urbanized development.

As detailed throughout Section 5.10, *Hydrology and Water Quality*, there are no mapped flood hazard zones located within the Planning Area; the entire Planning Area is located within an area of minimal flood hazard. Future development resulting from implementation of the General Plan Update could increase the potential for localized flooding in low spots or where infrastructure is unable to accommodate peak flows during a storm event. However, as discussed in Section 5.10, all future development and redevelopment projects would be required to comply with applicable Federal, State, regional, and local plans, policies, and regulations to address site-specific drainage and potential flooding risks. Specifically, future site-specific development would be required to comply with Municipal Code Chapter 13.12, *Storm Water and Urban Runoff Pollution Control*, and 13.16, *Standard Urban Stormwater Mitigation Plan and Low Impact Development Implementation*. Municipal Code Chapter 13.12 establishes required BMPs during operational phase of projects. Municipal Code Chapter 13.12 also indicates that each person applying to the City for a grading or building permit must submit satisfactory proof to the City that a SWPPP has been prepared, before the City issues any grading or building permit on the construction project. Municipal Code Chapter 13.16 requires subject new development and redevelopment projects to comply with SUSMP conditions assigned by the City, consisting of LID structural and non-structural BMPs; source control BMPs; and structural and non-structural BMPs for specific types of uses. Section 13.16.060,

Stormwater Pollution Control and Design Standards for Best Management Practices (BMPs), requires applicable development and redevelopment projects to submit a SUSMP for City review and approval, which is required to be incorporated into the applicant's project plans. Section 13.16.070, *Control of Erosion of Slopes and Channels*, requires BMPs to be used on slopes or channels in subject new development or redevelopment projects. Per Section 13.16.110, *Maintenance of Best Management Practices*, applicants for new subject development and redevelopment projects must agree to maintain any structural or treatment control BMPs. These regulations would minimize danger to life and property due to the hazards of flood, soil erosion, seepage and destruction of natural topography and plant material. Further, subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA. Construction of storm drainage improvements would occur as part of an overall development or infrastructure project, and would be considered in the environmental review associated with the specific project being proposed (refer to Section 5.10 for additional details).

The General Plan Update includes policies and actions to address public safety, which would limit risks to people and structures within the City. Proposed Public Safety Element Policy PS-1.2 directs coordination with service providers to promote the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery. Policy PS-4.1 coordinates fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services. Policy PS-4.2 involves LACoFD in the development review process so that fire safety is addressed in new and modified developments. Policy PS-4.4 requires that all buildings and facilities within the City comply with local, State, and Federal regulatory standards such as the California Building and Fire Codes, as well as other applicable fire safety standards. Policy PS-5.3 adheres to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community. Policy PS-5.4 encourages new developments that add substantial amounts of impervious surfaces to integrate LID BMPs to reduce stormwater runoff. Compliance with local, State, and Federal regulations, and General Plan Update goals, policies, and actions would reduce potential exposure of people or structures to significant risks resulting from runoff, post-fire slope instability, or drainage changes. No impact would occur in this regard.

Proposed General Plan Update Goals, Policies, and Actions:

PUBLIC SAFETY ELEMENT

Goal PS-1: **Emergency Operations.** A community prepared to provide effective response and recovery efforts in the event of an emergency.

Policy PS-1.2: **Critical Facilities.** Coordinate with service providers to ensure the resilience of critical facilities, lifeline services, and infrastructure, and plan for the use of critical facilities during post-disaster response and recovery.

Goal 4: **Fire Hazards.** A community protected from loss of life or injury and damage to property due to fire hazards.

Policy PS-4.1: **Fire Protection Services**. Coordinate fire protection services with LACoFD so that sufficient capacity, stations, personnel, and equipment are available to meet needs in Lawndale for fire protection and related emergency services.

Policy PS-4.2: **Development Review.** Involve LACoFD in the development review process so that fire safety is addressed in new and modified developments.

Action PS-4a: Require all new habitable structures be designed in accordance with the most recent California Building and Fire Code with local amendments adopted by the City.

Goal PS-5: **Flood Hazards.** A community that is protected from flood hazards.

Policy PS-5.3 **Site Design**. Adhere to the latest building, site, and design codes to avoid or minimize the risk of flooding hazards in the community.

Policy PS-5.4 **Best Management Practices.** Encourage new developments that add substantial amounts of impervious surfaces to integrate low impact development Best Management Practices to reduce stormwater runoff.

Policy PS-5.6: **Local Storm Drainage Infrastructure.** Maintain and regularly assess the status of local storm drainage infrastructure to confirm that the system is functioning property.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.20.5 CUMULATIVE IMPACTS

Section 4.0, *Basis of Cumulative Analysis*, identifies projected growth within the Planning Area and County with the potential to interact with the proposed Project to the extent that a significant cumulative effect relative to wildfire may occur. The cumulative projects' setting for wildfire considers the region and projects within the City.

Would the project, combined with other related cumulative projects, substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE and County regulatory maps. Therefore, future development associated with implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Additionally, future development associated with implementation of the Project and cumulative projects would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The County OAERP addresses the planned response to extraordinary situations associated with natural disasters and/or human caused incidents, including wildfires, and outlines mutual aid provisions within the Los Angeles County OA. The City's EOP addresses the City's planned response to natural or human-caused disasters and describes the organizational structures, roles, responsibilities, policies and protocols for providing emergency support. Future development associated with implementation of the Project and cumulative projects would be subject to similar fire protection

development standards and would be required to comply with each jurisdiction's established regulatory framework, including the respective municipal code and General Plan policies and programs to assist in protecting life and property in the event of a wildfire. The Project's would not contribute to cumulative wildfire hazard impacts. Thus, the Project and cumulative development projects' incremental effects involving an adopted emergency response plan or emergency evacuation plan would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Impact Analysis: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE and County regulatory maps. Therefore, future development associated with implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Urbanized land does not typically facilitate the spread of wildfire in the same manner as vegetated, open space areas. Future development and cumulative development would be required to comply with the Fire Code, which would further minimize and reduce impacts related to wildfire. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. As part of the City's development review process, the LACoFD would review all projects for related fire hazards. Wildfire risks would not change with adoption of the General Plan Update, and exposure to pollutant concentrations from wildfire for occupants in the Planning Area would not significantly increase. Accordingly, the Project's incremental contribution to wildfire risks exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Impact Analysis: The Planning Area and immediately surrounding area is highly urbanized and not located within an SRA or FHSZ per CAL FIRE regulatory maps. Therefore, future development associated with

implementation of the Project and cumulative projects would not be developed in an SRA or FHSZ. Future development and cumulative development could require the eventual construction and installation of new infrastructure or maintenance of existing infrastructure, including roads, water and sewer, and power lines to serve increased growth and development. Maintenance of existing infrastructure and the potential installation of new infrastructure for future development and cumulative development would be required to comply with Fire Code requirements and would be reviewed by the LACoFD to determine the specific fire requirements applicable to ensure compliance with the Fire Code. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. Thus, the Project's incremental contribution involving potential wildland fire hazards due to the installation or maintenance of local infrastructure would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

Would the project, combined with other related cumulative projects, expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Impact Analysis: Future development associated with implementation of the Project and cumulative projects would be subject to similar fire protection development standards and would be required to comply with each jurisdictions established regulatory framework, including the respective municipal code and General Plan policies and programs to assist in protecting life and property in the event of a fire. The Project's incremental contribution to cumulative wildfire hazard impacts would not be significant. As previously discussed, the City is highly urbanized and future development and redevelopment activities in the City under would occur in areas that have been previously developed. As a result, the degree of wildland fire hazard, including secondary hazards such as post-fire flooding and landslides, would not substantially change with adoption of the General Plan Update, and current hazards would not significantly increase.

As described previously, there are no SRA or FHSZs mapped within the Planning Area. As such, the General Plan Update does not approve, propose, or authorize development in an SRA or FHSZ per CAL FIRE and County regulatory maps. New development would be required to comply with the Fire Code, which would further minimize and reduce impacts related to potential fires within the City. As part of the City's development review process, the LACoFD would review all projects for fire related hazards. Additionally, the General Plan Update includes policies and programs to address public safety and emergency services. Accordingly, the Project's incremental contribution involving significant risks as a result of runoff, post-fire slope instability, or drainage changes would be less than cumulatively considerable.

Proposed General Plan Update Goals, Policies, and Actions: Refer to the General Plan goals, policies, and actions cited above.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.20.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Wildfire impacts associated with the implementation of the General Plan Update would have no impact; no significant unavoidable wildfire impacts would occur as a result of the General Plan Update.

5.20.7 REFERENCES

California Department of Forestry and Fire Protection (CAL FIRE), *FHSZ Viewer*, https://egis.fire.ca.gov/FHSZ/, accessed March 7, 2023a.

California Department of Forestry and Fire Protection (CAL FIRE*), Incident Data 3/9/23*, https://www.fire.ca.gov/incidents , accessed March 9, 2023b.

Los Angeles County Fire Department (LACoFD), *About Us,* https://fire.lacounty.gov/about-us-2/, accessed March 9, 2023.

Los Angeles County, *Fire Hazard Severity Zone Web App*, https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=d2ea45d15c784adfa601e84b38060c4e, accessed March 7, 2023.

Los Angeles County, *Los Angeles County 2035 General Plan*, October 2015.

United States Geological Survey (USGS), *Emergency Assessment of Post-Fire Debris-Flow Hazards*, 2021 https://landslides.usgs.gov/hazards/postfire_debrisflow/, accessed June 8, 2023.

6.0 OTHER CEQA CONSIDERATIONS

6.1 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

Pursuant to CEQA Guidelines Section 15126.2, Consideration and Discussion of Significant Environmental Effects, an EIR is required to consider: (a) The Significant Environmental Effects of the proposed Project; (b) Energy Impacts; (c) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented; (d) Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented; and (e) Growth-Inducing Impact of the Proposed Project.

In response to CEQA Guidelines, Section 15162.2 (a), Significant Environmental Effects of the Proposed Project and Section 15162 (c), Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented, are considered and identified in Section 5.0, *Environmental Analysis*, of this EIR. Energy Impacts, pursuant to CEQA Guidelines Section 15162.2 (b), are analyzed in Section 5.6, *Energy*.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

According to CEQA Guidelines Sections 15126(c) and 15126.2(d), an EIR is required to address any significant irreversible environmental changes that would occur should the proposed project be implemented. As stated in CEQA Guidelines Section 15126.2(d):

> *"Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

CONSUMPTION OF NONRENEWABLE RESOURCES

The environmental impacts associated with implementation of the General Plan Update are analyzed in Section 5.0. Future development would consume limited, slowly renewable and non-renewable resources. This consumption would occur during each individual project's construction phase and would continue throughout its operational lifetime.

Construction associated with future development would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to and from individual development sites. Construction would require the consumption of resources that are not renewable or which may renew so slowly as to be considered non-

renewable. These resources would include the following construction supplies: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The operational activities of new development accommodated through implementation of the General Plan Update would consume resources which would be similar to those currently consumed within the City (i.e., energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water). Fossil fuels would represent the primary energy source associated with both construction and ongoing operation, and the existing, finite supplies of these natural resources would be incrementally reduced. Future development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. Nonetheless, the proposed Project's energy requirements would represent a long-term commitment of essentially non-renewable resources.

Construction activities associated with implementation of the General Plan Update could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions; refer to Section 5.9, *Hazards and Hazardous Materials*. All potential demolition, grading, and excavation activities would be subject to the established regulatory framework to ensure that hazardous materials are not released into the environment. Compliance with the established regulatory framework and mitigation measures would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In addition, there is the potential that individual future development projects would use and store limited amounts of potentially hazardous materials typical; refer to Section 5.9. All future development activities requiring the routine use, storage, transport, or disposal of hazardous materials would be subject to all applicable Federal, State, and local regulations and standards in place for hazardous materials. Compliance with these regulations and standards would protect against significant and irreversible environmental changes due to the accidental release of hazardous materials.

In conclusion, future construction and operations would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of the individual developments. It is noted that the continued use of such resources would be on a relatively small scale in a regional context.

IRRETRIEVABLE COMMITMENTS/IRREVERSIBLE PHYSICAL CHANGES

Implementation of the General Plan Update would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the Project would result in irretrievable commitments by designating land for development that is more intense, in some instances, than current designations allow. Additionally, residential development would be allowed on land not currently designated for residential development. Development would physically change the environment in terms of aesthetics, air emissions, noise, and traffic. These physical changes are irreversible after development occurs. Therefore, the Project would result in changes in land use within the Planning Area that would commit future generations to these uses.

In summary, the General Plan Update includes an extensive policy framework that is designed to address land use and environmental issues to the greatest extent feasible, while allowing growth and economic prosperity for the City. Construction and operation of future development projects associated with Project implementation would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources that would limit the availability of these resource quantities for future generations or for other uses during the life of the Project. However, the Planning Area is an urbanized area and already uses such resources. Additionally, the continued use of such resources would be on a relatively small scale in a regional context. As such, although irreversible environmental changes would result from the Project, such changes would not be considered significant.

6.3 GROWTH-INDUCING IMPACTS

Section 15126.2(e) of the CEQA Guidelines requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA Guidelines as:

> *"The way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement. Growth-inducing impacts fall into two general categories: direct or indirect. Direct growth-inducing impacts are generally associated with new residences or businesses that could induce population growth directly. Indirect growth-inducing impacts provide urban services, such as the extension or roads or other infrastructure, to an undeveloped area that could induce population growth indirectly.

In general, a project may foster spatial, economic, or population growth in a geographic area if it results in any of the following:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering of economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or

- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an infill project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth. Note that the CEQA Guidelines require an EIR to "discuss the ways" a project could be growth inducing and to "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment." However, the CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (refer to CEQA Guidelines Section 15145).

In accordance with the CEQA Guidelines and based on the above-listed criteria, the project's potential growth-inducing impacts are evaluated below.

Removal of an Impediment to Growth: The Planning Area and surrounding area are fully developed and urbanized. Transportation and infrastructure exists to serve the range of residential and non-residential uses within the surrounding area. The General Plan Update does not introduce new roadways or new or significantly expanded infrastructure that would provide for additional development within the surrounding area. Potential infrastructure improvements associated with future site-specific development would not remove obstacles to growth since the Planning and surrounding area are already served by existing utility providers and potential improvements would be to serve the specific development being proposed. As the General Plan Update would not establish an essential public service or provide new access to an area, the proposed Project would not be considered growth-inducing.

Economic Expansion or Growth: In addition to residential uses, the Project anticipates the development of commercial uses within the Planning Area. The construction of future development projects would result in construction-related jobs. However, construction activities and durations would vary depending upon the specific development and would be temporary in respect to each individual development site and therefore, would not be considered growth-inducing.

Project operations would introduce new residents and jobs to the Planning Area. Future development associated with implementation of the General Plan Update would primarily consist of infill development and redevelopment of already developed sites. New residential development could occur and greater densities, providing additional housing opportunities that would further support commercial and retail uses within the City. Additional non-residential development would provide for new employment opportunities. Residents and employees would seek shopping, entertainment, employment, and other economic opportunities in the City and surrounding area. This could create an increased demand for goods and services that would encourage the creation of new businesses or the expansion of existing businesses. Although economic growth is anticipated within the Planning Area, significant economic growth resulting in the potential to significantly affect the environment is not anticipated as the surrounding area is urbanized.

Population Growth: A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The Planning Area is located within an urbanized area served by existing roads, transit, and infrastructure. The Project does not involve the extension of roads or infrastructure into undeveloped areas; refer to the "Removal of an Impediment to Growth" discussion above.

As shown in Table 3-4, *General Plan Update Growth Assumptions*, buildout of the General Plan Update through 2045 could yield up to 3,942 new housing units and 808,864 square feet of new non-residential building square footage within the Planning Area. The General Plan Update is intended to accommodate the City's fair share of Statewide housing needs, based on regional numbers provided by the California Department of Housing and Community Development on a regular basis (every five to eight years). The City of Lawndale 2021-2029 Housing Element was adopted in February 2022 and accommodates the City's share of the regional housing need for the 2021-2029 RHNA period of 2,463 units. The City's 2021-2029 Housing Element identifies the implementation of Housing Overlays as the primary opportunity to accommodate the City's RHNA allocation. The Project has the potential to yield an additional 3,942 dwelling units and 9,482 residents over existing conditions. This would be an approximately 34 percent increase over existing conditions and an approximately 38 percent increase over SCAG's projected future conditions of 34,400 residents (2045). Thus, Project implementation would exceed the population projections anticipated by SCAG's growth forecasts.

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local Los Angeles County governments, among other counties. SCAG provides household, population, and employment projection estimates in five-year increments through 2045. While Project growth projections are anticipated to exceed SCAG's 2045 population, SCAG's projections, which are compiled using a number of sources including adopted plans, historical trends, and interviews with local jurisdictions, tend to be more accurate on a regional level than on a local or city level. It is likely that through a combination of market changes, catalytic projects, updated land use direction in the General Plan, and other factors, Lawndale could capture either more or less of expected regional growth than forecasted by SCAG. Discrepancies between Project and regional forecasts can also be attributed to the RHNA process. The General Plan Update is intended to implement the City's 2021-2029 Housing Element; SCAG's Connect SoCal growth forecasts through 2045 do not consider the regional housing need for the 2021-2029 period, as jurisdictional allocations were not known at the time of SCAG's Connect SoCal adoption. The regional housing needs and associated General Plan growth projections will be included as part of SCAG's future growth forecasts.

Although the Project would allow for currently unplanned population growth anticipated in the existing General Plan and by SCAG, this Draft EIR identifies General Plan Update goals, policies, and actions, where appropriate, that would serve to reduce or eliminate potentially significant impacts associated with specific environmental issues associated with growth. Sections 5.1 through 5.20 provide a discussion of environmental effects associated with development allowed under the General Plan Update.

With implementation of General Plan Update goals, policies, and actions intended to guide growth to appropriate areas and provide services necessary to accommodate growth, the land uses allowed under

the General Plan Update, the infrastructure anticipated to accommodate proposed land uses, and the goal and policy framework would not induce growth that would exceed adopted thresholds. Therefore, population and housing growth associated with the General Plan Update would result a less than significant impact.

Establishment of a Precedent-Setting Action: The General Plan is a long-term plan intended to accommodate projected population, housing, and employment growth, including the appropriate balance among these factors with the necessary public services and infrastructure. The proposed General Plan Update would serve as a comprehensive, long-term plan for the physical development of Lawndale. The proposed General Plan Update would only regulate future land development within the Planning Area and would not induce growth within areas outside of the City's jurisdiction. Any future development within the Planning Area would be reviewed in light of the General Plan and this General Plan Update EIR pursuant to CEQA on a project-by-project basis. Future development would be required to comply with the goals, policies, and actions intended to reduce potential environmental impacts associated with future site-specific development. Thus, Project implementation would not involve a precedent-setting action that could significantly impact the environment.

Development or Encroachment of Open Space: As stated, the Planning Area is located within an urbanized area. Park and open space resources within the City are limited and primarily associated with parks and schools. The Project does not propose modifications to these existing resources and would not result in encroachment into these areas. The Project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of an existing open space.

6.4 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the General Plan Update are discussed in Section 5.0. Refer to those discussions for further details and analysis of the significant and unavoidable impacts identified below:

Air Quality

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.
- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

Greenhouse Gas Emissions

- Project implementation would generate greenhouse gas emissions that would not satisfy the Greenhouse Gas reduction targets established by Federal and State law and may have a significant effect on the environment.
- Project implementation would contribute to global climate change through a cumulatively considerable contribution of greenhouse gases. The Project would result in a cumulatively considerable and significant adverse GHG emissions impact.

This page intentionally left blank.

7.0 ALTERNATIVES

7.1 INTRODUCTION

Section 15126.6 of the CEQA Guidelines requires the identification and evaluation of a range of reasonable alternatives designed to feasibly achieve the most basic objectives of the project, while avoiding or substantially lessening any of the significant environmental effects of the project. In addition, CEQA requires a comparative evaluation of the merits of the alternatives.

Pursuant to Section 15126.6(f)(1) of the CEQA Guidelines, factors that may be taken into account when addressing the feasibility of alternatives include, but are not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plan or regulator limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). Although these factors do not present a strict limit on the scope of reasonable alternatives to be considered, they help establish the context in which "the rule of reason" is measured against when determining an appropriate range of alternatives sufficient to establish and foster meaningful public participation and informed decision-making.

7.2 ALTERNATIVES CONSIDERED IN THIS EIR

FACTORS GUIDING SELECTION OF ALTERNATIVES

A Notice of Preparation (NOP) was circulated to the public and a public scoping meeting was held during the public review period to solicit recommendations for a reasonable range of alternatives to the proposed project. No specific alternatives were recommended by commenting agencies or the general public during the NOP public review and comment period.

An EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with an action, while at the same time avoiding or substantially lessening any of the significant effects associated with the proposed project. As described in Section 3.0, *Project Description*, the following objectives have been identified for the proposed Project:

1. Reflect the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
3. Protect Lawndale's existing residences, character, and sense of community;
4. Proactively plan for and accommodate local and regional growth in a responsible manner;
5. Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
6. Allow for a range of high-quality housing options;

7. Attract and retain businesses and industries that provide jobs for local residents;
8. Continue to maintain and improve multimodal transportation opportunities;
9. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
10. Address new requirements of State law; and
11. Address emerging transportation, housing, and employment trends.

SIGNIFICANT AND UNAVOIDABLE IMPACTS

The General Plan Update would result in the following significant and unavoidable impacts, which are described in Sections 5.1 through 5.20:

Air Quality

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.
- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

Greenhouse Gas Emissions

- Project implementation would generate greenhouse gas emissions that would not satisfy the Greenhouse Gas reduction targets established by Federal and State law and may have a significant effect on the environment.
- Project implementation would contribute to global climate change through a cumulatively considerable contribution of greenhouse gases. The Project would result in a cumulatively considerable and significant adverse GHG emissions impact.

Implementation of the proposed General Plan goals, policies and actions can reduce all other potentially significant impacts to less than significant levels. This section considers alternatives that could otherwise avoid or minimize these significant and unavoidable impacts. A description of each alternative and a comparative environmental evaluation of the impacts identified for the General Plan Update is provided below.

An EIR must identify an “environmentally superior” alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative’s environmental impacts are compared to the proposed Project and determined to be environmentally superior, inferior, or neutral. However, as stated above, only those impacts found to be significant and unavoidable for the proposed Project are

used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed Project.

ALTERNATIVES TO THE GENERAL PLAN UPDATE

Two alternatives to the General Plan Update were considered based on the analysis performed to identify the environmental effects of the proposed Project. Project alternatives focus on amending land uses to potentially address impacts. The alternatives analyzed in this EIR include the following:

Alternative 1: No Project Alternative/Existing General Plan.

As required by CEQA Guidelines Section 15126.6(e), under Alternative 1, the City would not adopt the General Plan Update. The existing Lawndale General Plan would continue to be implemented and no changes to the General Plan, including the Land Use Map, goals, policies, or actions would occur. This Alternative assumes that ultimate development of the 1992 General Plan would occur and the 1992 General Plan would continue to provide outdated information regarding several issues, including projections and policy direction that were identified in the 1990s that are not reflective of the existing socioeconomic data and anticipated development patterns. This Alternative assumes that increased residential development opportunities in the Hawthorne Boulevard Specific Plan area and Housing Opportunity Overlay land use designation areas in order to accommodate the City's Regional Housing Needs Allocation (RHNA) as identified in the 2021-2029 Housing Element, would not occur. Subsequent projects, such as updating the Hawthorne Boulevard Specific Plan and amending the Municipal Code (including the zoning map), would not occur. The existing General Plan Land Use Map is shown on Figure 3.3 in Section 3.0, *Project Description*.

Alternative 2: Reduced Growth Alternative

Under Alternative 2, the City would adopt the updated General Plan policy document, but at residential densities lower than those reflected in the proposed General Plan Update. This Alternative is defined by two major changes from the proposed General Plan Update:

1. Reduction in the maximum density associated with the Housing Opportunity Overlay (HOO) land use designation; in Alternative 2, the maximum density for residential development in areas designated with the HOO is reduced from 100 du/ac to 33 du/ac (consistent with the maximum density proposed for the High Density Residential land use designation).
2. Reduction in the maximum density associated with residential development within the Hawthorne Boulevard Specific Plan (HBSP) land use designation; in Alternative 2, the maximum density for residential development in the HBSP is reduced from 150 du/ac to 33 du/ac (consistent with the maximum density proposed for the High Density Residential land use designation).

Under Alternative 2, non-residential development potential and anticipated job growth would remain unchanged from the proposed General Plan Update. This alternative continues to allow for mixed-use opportunities with less residential development potential than allowed under the General Plan Update. It also reflects a maximum residential density of 33 du/ac, consistent with the maximum residential density allowed under the current General Plan. This alternative was developed to potentially reduce the severity of potential impacts related to air quality and greenhouse gas emissions, as overall development of residential uses would be less than what could develop under the proposed Project.

7.3 ENVIRONMENTAL ANALYSIS

A summary of the growth projections, including population growth, housing units, jobs, and the resultant job/housing balance for the project and each alternative is shown in Table 7-1, *Growth Projections by Alternative*.

Table 7-1
Growth Projections by Alternative

Alternative	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs	Jobs per Housing Unit
Existing Conditions					
Planning Area	11,463	37,948	4,542,162	6,470	0.56
New Growth					
Proposed General Plan	3,942	9,482	808,864	2,738	-
Alternative 1: No Project/Existing General Plan	1,923	704	528,817	2,247	-
Alternative 2: Reduced Growth Alternative	2,339	5,843	808,864	2,738	-
Buildout Growth: Existing plus New Growth					
Proposed General Plan	15,405	47,430	5,351,026	9,208	0.59
Alternative 1: No Project/Existing General Plan	13,386	38,652	5,070,979	8,717	0.65
Alternative 2: Reduced Growth Alternative	13,802	43,791	5,351,026	9,208	0.67

The alternatives analysis provides a summary of the relative impact level of significance associated with each alternative for each of the environmental issue areas analyzed in this EIR. Following the analysis of each alternative, Table 7-4, *Comparison of Alternatives*, summarizes the comparative effects of each alternative with the proposed Project.

The primary difference between the proposed Project and Alternative 2 is that Alternative 2 would result in approximately 1,603 fewer housing units and 3,639 fewer residents within the Planning Area when compared to the proposed Project; refer to Table 7-3, *Alternative 2: Reduced Growth Alternative Compared to the Proposed Project*.

ALTERNATIVE 1 – NO PROJECT/EXISTING GENERAL PLAN

Under Alternative 1, the City would continue to implement the existing General Plan and no changes would be made to address updated OPR General Plan Guidelines, or the requirements of State law. Since

adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions. Additionally, the City recently updated its 2021-2029 Housing Element (adopted in February 2022), and the existing General Plan does not conform to State requirements regarding planning for future housing growth. In the 2021-2029 Housing Element, the City introduced two new mechanisms to allow for residential development to be created to implement the Housing Element on sites considered viable for housing development. The first is "Housing Overlay 100", which will be applied to 16 nonresidential sites outside of the Hawthorne Boulevard Specific Plan area and allow for residential densities of up to 100 dwelling units per acre. The second is "Housing Overlay 150" which will be applied to 68 nonresidential sites inside the Hawthorne Boulevard Specific Plan area, will allow for residential densities up to 150 dwelling units per acre. The General Plan goals, policies, and actions, as well as the Land Use Map, would not be updated to address the vision and concerns of the City's residents, property owners, decision-makers, and other stakeholders that actively participated in the visioning and goal and policy development process.

Alternative 1 would result in the continuation of existing conditions and development levels, as described in Section 5.11, *Land Use and Planning*, and as shown in Table 3-1 in Section 3.0, *Project Description*. New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map as shown on Figure 3.3 in Section 3.0. Table 7-2, *Alternative 1: No Project/Existing General Plan Alternative Compared to the Proposed Project*, compares the assumed development potential associated with the 1992 General Plan and the General Plan Update 2045 buildout.

Table 7-2
Alternative 1: No Project/Existing General Plan Alternative Compared to the Proposed Project

Alternative	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs	Jobs per Housing Unit
Alternative 1: Existing General Plan/No Project	13,386	38,652	5,070,979	8,717	0.65
General Plan Update (Proposed Project)	15,405	47,430	5,351,026	9,208	0.59
Difference	**-2,019**	**-8,778**	**-280,047**	**-491**	-

As shown in Table 7-2, Alternative 1 (No Project/Existing General Plan Alternative) would result in less development within the Planning Area compared to the proposed Project. Under Alternative 1, the existing General Plan policy framework would still be in effect, which would constitute a status quo approach to land use regulation in the City.

The Proposed Land Use Map, along with the policy framework proposed by the General Plan Update, encourages and aims to achieve a community with a balanced land use pattern that meets the City's long-term housing, employment, and civic needs. The land uses allowed under the General Plan Update provide opportunities for cohesive new growth at infill locations primarily within the Hawthorne Boulevard

Specific Plan area. A balanced land use pattern would create a community where new development blends with existing neighborhoods. The proposed General Plan Update carries forward and enhances policies and measures from the City's existing General Plan that were intended for environmental protection. The proposed General Plan Update was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection.

Alternative 1 would not include updated policies, particularly those related to housing, greenhouse gases, hazards, complete streets, and environmental justice to address environmental health concerns for disadvantaged communities, as required by State law. This alternative would not include policies proposed in the General Plan Update to ensure protection of environmental resources, both at a project level and under cumulative conditions, consistent with the objectives of CEQA.

Alternative 1 fails to meet several of the basic Project objectives, including the following:

- Reflect the current goals and vision expressed by City residents, businesses, decision-makers, and other stakeholders;
- Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
- Proactively plan for and accommodate local and regional growth in a responsible manner;
- Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
- Allow for a range of high-quality housing options;
- Attract and retain businesses and industries that provide jobs for local residents;
- Continue to maintain and improve multimodal transportation opportunities;
- Address new requirements of State law; and
- Address emerging transportation, housing, and employment trends.

Aesthetics

As described in Section 5.1, *Aesthetics*, impacts related to Aesthetics were found to be less than significant. Both the General Plan Update and No Project/Existing General Plan Alternative would anticipate increased development within the City through future development that would result in densification of the City. Alternative 1 would result in decreased densities in the Planning Area when compared to the General Plan Update. Future projects under both development scenarios would be subject to applicable Municipal Code requirements. Although buildout of this Alternative would result in 2,019 fewer housing units and 280,047 fewer square feet of nonresidential uses, overall, the Planning Area would experience significant development compared to existing conditions which would change the character and image of the area under both Alternative 1 and the proposed Project.

Generally, the existing General Plan would not address the visual character of future development to the extent of the General Plan Update. For example, the General Plan Update includes goals and policies to develop and enforce design standards and objective design guidelines, and include site planning

requirements. Additionally, this Alternative would not require the update of the Hawthorne Boulevard Specific Plan area, which would allow a combination of commercial and residential uses together in the same area, creating more pedestrian and transit-oriented neighborhoods. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Agricultural Resources

As described in Section 5.2, *Agricultural Resources*, the proposed General Plan Update would result in no impacts to agriculture and forestry resources. Like the General Plan Update, Alternative 1 would accommodate development generally in the same areas, and these areas are already urbanized. Given that no agriculture and forestry resources would be impacted by the proposed Project, impacts associated with Alternative 1 would be the same and no impacts would occur. As such, Alternative 1 would be neither environmentally superior nor inferior to the General Plan Update.

Air Quality

As described in Section 5.3, *Air Quality*, construction and operation of future developments would occur within close proximity to sensitive receptors, and there is the potential for localized emissions to exceed regulatory levels. The following significant impacts related to air quality have been identified:

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.
- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

When compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update includes a range of goals and policies that would reduce air quality emissions, including policies to encourage mixed-use development, complete streets, and multi-modal improvements that would further reduce air quality impacts. Additionally, when compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update presents substantially more opportunities for trip internalization and increased opportunities for walking and bicycling due to the proposed mix of higher density residential and commercial development. While land uses and development under Alternative 1 would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the General Plan Update, the decrease in residential units and non-residential building square footage, and the corresponding reduction in construction emissions, operational emissions, and potential reductions in overall traffic volumes would result in reductions in air emissions under Alternative 1 when compared to the proposed General Plan Update, although impacts to air quality would continue to be significant and unavoidable. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

Biological Resources

The Planning Area is urbanized and developed with residential and non-residential uses. The Planning Area consists primarily of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists of primarily ornamental and/or nonnative plant species. As described in Section 5.4, *Biological Resources*, the General Plan Update does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. However, subsequent development projects under the proposed General Plan Update could result in direct impacts to certain species found present on an individual project site. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects. Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to sensitive species to a less than significant level.

Alternative 1 would result in similar development patterns to the General Plan Update, which could result in a less than significant impact to biological resources. The proposed General Plan Update would also include updated biological policies and actions aimed at protecting biological resources (as described in detail in Section 5.4), which Alternative 1 would not include. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Cultural Resources

As described in Section 5.5, *Cultural Resources*, while the General Plan Update does not directly propose site-specific development with the potential to directly impact cultural resources, future development associated with implementation of the General Plan Update could cause a substantial adverse change in the significance of known or unknown historic or archaeological resources. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations relative to historic and potentially historic resources. The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including historical and archaeological resources. Compliance with the General Plan Update policies and actions and existing regulations, would not cause a substantial adverse change in the significance of a historical and/or cultural resource and impacts would be less than significant.

Alternative 1 would result in similar development patterns and a similar development footprint to the General Plan Update. However, because Alternative 1 would not update cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring that is included in the proposed General Plan Update, impacts to cultural resources would be greater when compared to the General Plan Update which does not include additional and updated policies related to cultural resources. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Energy

As described in Section 5.6, *Energy*, buildout of the General Plan Update would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel

fuel), and from off-road construction activities (e.g. diesel fuel) associated with 2045 buildout of the General Plan Update. Buildout of the General Plan Update would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Energy use impacts associated with the implementation of the General Plan Update would be less than significant.

When compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update includes a range of goals and policies that would reduce energy usage, including policies to encourage mixed-use development, complete streets, and multi-modal improvements that would further reduce per capita energy usage. Additionally, when compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update presents substantially more opportunities for trip internalization and increased opportunities for walking and bicycling to the proposed mix of higher density residential and commercial development. While land uses and development under Alternative 1 would be required to adhere to the same local, State, and regional measures regulating energy usage as the General Plan Update, the decrease in residential units and non-residential building square footage, and the corresponding reduction in electricity and gas for the operation of buildings, diesel fuel for off-road construction activities, and potential reductions in gasoline due to a decrease in the overall traffic volumes would result in reductions in energy usage under Alternative 1 when compared to the proposed General Plan Update. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

Geology and Soils

As described in Section 5.7, *Geology and Soils*, geology and soils impacts associated with the implementation of the General Plan Update would be less than significant. It is possible that undiscovered paleontological resources could be encountered during future ground-disturbing activities within the Planning Area. Future development associated with implementation of the General Plan Update would be required to assess the potential for development proposals to significantly impact paleontological resources pursuant to CEQA. If the project involves earthworks, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact the resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation. With implementation of the General Plan Update policies and actions, potential impacts to paleontological resources associated with future development anticipated by the General Plan Update would be reduced to less than significant.

Alternative 1 would result in similar development patterns as the General Plan Update. Since the Planning Area is the same under both development scenarios, similar physical constraints related to geology and soils exist. The potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be similar under this Alternative and the General Plan Update. Further, new development would be required to comply with the California Building Code and applicable Municipal Code requirements. However, this Alternative would not include the updated policies related to geologic hazards, including requirements for project reviews and standards for construction and building practices as the General Plan Update (as described in detail in Section 5.7).

Additionally, this Alternative would not update paleontological resource policies to include new policies and actions related to agency coordination, consultation, and monitoring that is included in the proposed General Plan Update, therefore impacts to paleontological resources would be greater when compared to the General Plan Update which does not include additional and updated policies related to paleontological resources. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Greenhouse Gas Emissions

As described in Section 5.8, *Greenhouse Gas Emissions,* the proposed Project would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions, and implementation of the General Plan Update's goals, policies and actions would reduce GHG emissions. However, development projects associated with implementation of the proposed Project, would potentially generate emissions inconsistent with the State's long-term goals for reducing GHG emissions in the State of California, particularly the net-zero target as promulgated under AB 1279. As such, the City cannot state with certainty whether implementation of the General Plan Update would meet the State's community emissions target. Therefore, the proposed Project would have a cumulatively significant and unavoidable adverse impact in regards to greenhouse gas emissions.

When compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update includes a range of goals and policies that would reduce GHG emissions, including policies to encourage mixed-use development, complete streets, and multi-modal improvements that would further reduce per capita GHG impacts. Additionally, when compared to Alternative 1 (No Project/Existing General Plan), the General Plan Update presents substantially more opportunities for trip internalization and increased opportunities for walking and bicycling due to their proposed mix of higher density residential and commercial development. While land uses and development under Alternative 1 would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the General Plan Update, the decrease in residential units and non-residential building square footage, and the corresponding reduction in construction emissions, operational emission, and potential reductions in overall traffic volumes would result in reductions in greenhouse gas emissions under Alternative 1 when compared to the proposed General Plan Update, although GHG impacts would continue to be significant and unavoidable. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

Hazards and Hazardous Materials

As described in Section 5.9, *Hazards and Hazardous Materials*, all impacts related to hazardous materials, aircraft hazards, and emergency response were found to be less than significant.

The General Plan Update would include updated policies and actions aimed at protecting the public from hazardous materials. These policies and actions in the General Plan Update would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The General Plan Update also includes policies and actions to ensure that the City has adequate

emergency response plans and measures to respond in the event of an accidental release of a hazardous substance (as described in detail in Section 5.9).

Similar to the General Plan Update, Alternative 1 would result in additional urban uses including commercial, and residential development. However, Alternative 1 would not include the updated policies and actions aimed at protecting the public from hazardous materials that are included as part of the General Plan Update. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Hydrology and Water Quality

As described in Section 5.10, *Hydrology and Water Quality*, under all impact areas, implementation of the General Plan Update would result in less than significant impacts related to Hydrology and Water Quality.

While this Alternative would result in less dense and intense development compared to the General Plan Update, all new development would be subject to applicable stormwater and water quality requirements per the Los Angeles RWQCB. This variation in intensity and land use designation changes would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing Federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Potential hydrology and water quality impact for this Alternative, like the proposed Project, would be less than significant.

Alternative 1 would result in slightly reduced development of housing units and non-residential square feet when compared to the General Plan Update. Compared to the General Plan Update, the potential water quality impacts related to construction and operation would be similar. As described in Section 5.10, implementation of the General Plan Update would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. Future development under all alternatives would also be required to submit a SWPPP with BMPs to the RWQCB and comply with all storm water sewer system (MS4) requirements. It would be expected that impacts related to water quality would be similar under Alternative 1 as compared to the General Plan Update. As such, Alternative 1 would be neither environmentally superior nor inferior to the General Plan Update.

Land Use and Planning

The proposed General Plan Update and Alternative 1 are long-range land use plans. As described in Section 5.11, *Land Use and Planning*, all impacts related to land use and planning were found to be less than significant under the General Plan Update. As described previously, the General Plan Update would include adoption of the updated policy document. Under Alternative 1, the existing Land Use Element would continue to provide outdated information that does not reflect the current conditions or goals of the City. This Alternative would prevent the City from achieving some of the core objectives of the General Plan Update to meet new State requirements and accommodating the City's RHNA allocation as identified in the City's 2021-2029 Housing Element. In addition, the General Plan Update would allow for greater consistency with applicable State and regional plans related to the provision of housing options at varying densities and income levels within an area served by transit, retail, and services to provide opportunities to reduce VMT and associated GHG emissions when compared to Alternative 1. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Mineral Resources

As described in Section 5.12, *Mineral Resources*, the General Plan Update would result in no impacts relating to mineral resources. Like the General Plan Update, Alternative 1 would accommodate development generally in the same areas, and these areas are already urbanized. Given that no mineral resources would be impacted by the proposed Project, impacts associated with Alternative 1 would be the same and would remain less than significant. As such, Alternative 1 would be neither environmentally superior nor inferior to the General Plan Update.

Noise

As described in Section 5.13, *Noise*, while the General Plan Update does not directly propose site-specific development, future development associated with implementation of the General Plan Update could generate additional noise from construction and operational activities associated with future projects. Where future development projects under the General Plan Update may be exposed to noise levels that exceed the land use compatibility criteria, such as residential developments within the Hawthorne Boulevard Specific Plan area or sensitive land uses developed adjacent to the existing rail line, impacts could be mitigated to a level that is less than significant with the implementation of noise control measures, such as relocating residential outdoor recreational areas away from 60 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Additionally, the General Plan Update Public Safety Element includes policies and actions intended to minimize exposure to excessive noise, including noise associated with traffic, stationary noise sources, and construction noise.

Alternative 1 would result in similar development patterns and a similar development footprint as the General Plan Update. Alternative 1 would allow for slightly less development (2,019 fewer housing units and 280,047 square feet less of non-residential uses), resulting in a corresponding reduction in construction and operational noise. The decrease in residential units and non-residential building square footage, and the corresponding reduction in overall traffic volumes would result in reductions in roadway noise under Alternative 1 when compared to the proposed General Plan Update. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

Population and Housing

As shown in Table 7-2, Alternative 1 would allow for 2,019 fewer residential units which would result in 8,778 less residents compared to the General Plan Update. Alternative 1 would not establish updated goals and policies intended to reduce potential growth-related impacts when compared to the General Plan Update. The Existing General Plan does not reflect the most current population, employment, and housing numbers or projections, nor does it provide quantitative population, employment, and housing projections for the year 2045. In contrast, the General Plan Update reflects existing population, employment, and housing conditions and provides projections to 2045.

While the amount and typology of allowable development under the General Plan Update has been crafted to meet City's Regional Housing Needs Allocation (RHNA) for future housing needs, Alternative 1, would not allow the City to adequately plan for population growth and housing to meet its RHNA obligations. The City failing to meet its RHNA obligations would result in the decertification of the adopted

Housing Element by the State and potential penalties such as the loss of significant grants. As such, this Alternative would be considered environmentally inferior to the General Plan Update.

Public Services and Recreation

As described in Section 5.15, *Public Services* and Section 5.16, *Parks and Recreation*, the General Plan Update would result in less than significant impacts relating to public services, parks and recreation. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The General Plan Update includes policies and actions and compliance with the Municipal Code would require payment of impact fees to the City and other public agencies to ensure that additional development allowed does not have adverse impacts on these services and agencies.

Under Alternative 1, the development area and development types would remain similar, however, there would be fewer jobs, housing units, and reduced population increase when compared to the General Plan Update and thus, impacts to public services (the demand for police, fire and other public services) would be slightly reduced. Overall, Alternative 1 would have a slightly reduced impact to public services when compared to the proposed Project. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

Transportation

As described in Section 5.17, *Transportation*, transportation impacts associated with implementation of the General Plan Update would be less than significant. The proposed Project would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities or the performance or safety of those facilities. The Project includes goals, policies and actions to encourage new and improved facilities to support multi-modal transportation and access within the Planning Area. Similarly, Alternative 1 would provide for increased density and development within the Planning Area and would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities or the performance or safety of those facilities.

The proposed Project would result in a VMT per capita and VMT per employee below the Los Angeles Countywide average. Comparing the Project to Alternative 1, there would be an increase in VMT per capita and a decrease in VMT per employee. As such, Alternative 1 would be neither environmentally superior nor inferior to the General Plan Update.

Tribal Cultural Resources

As described in Section 5.18, *Tribal Cultural Resources*, while the General Plan Update does not directly propose site-specific development with the potential to directly impact tribal cultural resources, future development associated with implementation of the General Plan Update could cause a substantial adverse change in the significance of known or unknown tribal cultural resources. Potential impacts to tribal cultural resources associated with future development would be reduced through implementation of General Plan Update policies and actions. Subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Subsequent discretionary projects implemented in accordance with the General Plan Update would be subject to the provisions of AB 52 and may require tribal consultation

with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultation may identify tribal cultural resources not yet found and formally recorded that could be impacted by subsequent projects. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Alternative 1 would result in similar development patterns and a similar development footprint as the proposed General Plan Update. However, Alternative 1 would not update tribal cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring compared with the General Plan Update. As such, Alternative 1 would be considered environmentally inferior to the General Plan Update.

Utilities and Service Systems

As described in Section 5.19, *Utilities and Service Systems*, the General Plan Update would result in less than significant impacts relating to utilities and service systems.

New development would place increased demands on utilities. Under Alternative 1, the Planning Area would be developed with similar development patterns and uses as the General Plan Update; however, the overall residential intensity/density, and job increases would be reduced. The quantity of infrastructure installed would not be substantially reduced, as this alternative would require similar development patterns and footprints, but the demand for utility services, including wastewater and solid waste services would be less than would be required under the General Plan Update. However, both Alternative 1 and the proposed Project would likely require the construction or expansion of new utilities to serve the site-specific development that is being proposed. The quantity of infrastructure installed would not be substantially reduced, as the Project Area is urbanized and contains existing utilities infrastructure. The potential environmental effects associated with infrastructure projects would be similar under Alternative 1 and the proposed Project. Similarly, storm drainage runoff under Alternative 1 would be approximately the same when compared to the proposed Project, due to the general development footprint remaining the same for this alternative when compared to the General Plan Update. Since demand for utilities would be slightly less under Alternative 1 due to the lower densities and associated development potential, Alternative 1 would be considered environmentally superior to the General Plan Update.

Wildfire

As described in Section 5.20, *Wildfire*, the Planning Area is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; the General Plan Update would result in no impacts related to wildfire. Like the General Plan Update, Alternative 1 would accommodate development generally in the same areas, and these areas are already urbanized. Given that the Planning Area is not located in an area of high fire hazard potential, impacts associated with Alternative 1 would be the same and no impacts would occur. As such, Alternative 1 would be neither environmentally superior nor inferior to the General Plan Update.

Irreversible Effects

The proposed Project would have a less than significant impact associated with irreversible environmental effects as described in Section 6.0, *Other CEQA Considerations*. Implementation of the General Plan Update would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the Project would result in irretrievable commitments by designating land for development that is more intense, in some instances, than current designations allow. Additionally, residential development would be allowed on land not currently designated for residential development. Development would physically change the environment in terms of aesthetics, air emissions, noise, and traffic. Therefore, the Project would result in changes in land use within the Planning Area that would commit future generations to these uses. Construction and operation of future development projects associated with Project implementation would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources that would limit the availability of these resource quantities for future generations or for other uses during the life of the Project. However, the Planning Area is an urbanized area and already uses such resources. Additionally, the continued use of such resources would be on a relatively small scale in a regional context. As such, although irreversible environmental changes would result from the Project, such changes would not be considered significant.

During the planning horizon, development under Alternative 1 would be reduced in comparison to the General Plan Update. Under cumulative conditions, Alternative 1 would result in less residential and less non-residential floor area (see Table 7-1). Alternative 1 would use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels lower than the proposed Project. Alternative 1 would have slightly reduced impacts in comparison to the General Plan Update due to reduced development levels. As such, Alternative 1 would be considered environmentally superior to the General Plan Update.

ALTERNATIVE 2 – REDUCED GROWTH ALTERNATIVE

Alternative 2 (Reduced Growth Alternative) continues to allow for new development in mixed-use opportunities, like those included in the proposed Project, but at lower densities that are more consistent with those allowed under the current General Plan. Table 7-3, *Alternative 2: Reduced Growth Alternative Compared to the Proposed Project*, compares the assumed development potential associated with the Reduced Growth Alternative and the General Plan Update 2045 buildout.

Table 7-3
Alternative 2: Reduced Growth Alternative Compared to the Proposed Project

Alternative	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs	Jobs per Housing Unit
Alternative 2: Reduced Growth Alternative	13,802	43,791	5,351,026	9,208	0.67
General Plan Update (Proposed Project)	15,405	47,430	5,351,026	9,208	0.59
Difference	**-1,603**	**-3,639**	**0**	**0**	**-**

The goals, policies, and actions of the General Plan Update would apply to subsequent development, planning, and infrastructure projects under this alternative. This Alternative was developed to reduce the severity of potential impacts related to air quality and greenhouse gas emissions, as overall development of residential uses within the Planning Area would be less than what could under the proposed Project.

As shown in Table 7-3, Alternative 2 would result in approximately 1,603 fewer housing units and 3,639 fewer residents within the Planning Area when compared to the proposed General Plan Land Use Map. Nonresidential development potential and employment opportunities would remain the same under this alternative when compared to the proposed General Plan Update. The City recently updated its 2021-2029 Housing Element (adopted in February 2022), and the existing General Plan does not conform to State requirements regarding planning for future housing growth. In the 2021-2029 Housing Element, the City introduced two new mechanisms to allow for residential development to be created to implement the Housing Element on sites considered viable for housing development. The first is "Housing Overlay 100", which will be applied to 16 nonresidential sites outside of the Hawthorne Boulevard Specific Plan area and allow for residential densities of up to 100 dwelling units per acre. The second is "Housing Overlay 150" which will be applied to 68 nonresidential sites inside the Hawthorne Boulevard Specific Plan area, will allow for residential densities up to 150 dwelling units per acre. This Alternative assumes that the 2021-2029 Housing Element would be in non-compliance, since it would not implement these mechanisms at the planned densities.

Alternative 2 fails to meet several of the basic Project objectives, including the following:

- Proactively plan for and accommodate local and regional growth in a responsible manner;
- Allow for a range of high-quality housing options;
- Address new requirements of State law; and
- Address emerging transportation, housing, and employment trends.

Aesthetics

As described in Section 5.1, *Aesthetics*, impacts related to Aesthetics were found be less than significant. Both the General Plan Update and Reduced Growth Alternative would anticipate increased development and associated densification within the City. The proposed General Plan Update and Alternative 2 would

allow for an increase in density of the existing land uses than is currently allowed. Future projects under both development scenarios would be subject to applicable Municipal Code requirements. Although, buildout of this Alternative would result in 1,603 fewer housing units, overall, the Planning Area would experience significant development compared to existing conditions which would change the character and image of the area under both Alternative 2 and the proposed Project.

Similar to the General Plan Update, Alternative 2 would provide guidance as to the intensity and density of development. Future projects under both development scenarios would be subject to applicable Municipal Code requirements and be guided by relevant General Plan Update policies. Neither Alternative 2 nor the proposed Project would conflict with applicable zoning and other regulations governing scenic quality. As such, Alternative 2 would be neither environmentally superior nor inferior to the General Plan Update.

Agricultural Resources

As described in Section 5.2, *Agricultural Resources*, the proposed General Plan Update would result in no impacts to agriculture and forestry resources. Like the General Plan Update, Alternative 2 would accommodate development generally in the same areas, and these areas are already urbanized. Given that no agriculture and forestry resources would be impacted by the proposed Project, impacts associated with Alternative 2 would be the same and no impacts would occur. As such, Alternative 2 would be neither environmentally superior nor inferior to the General Plan Update.

Air Quality

As described in Section 5.3, *Air Quality*, construction and operation of future developments would occur within close proximity to sensitive receptors, and there is the potential for localized emissions to exceed regulatory levels. The following significant impacts related to air quality have been identified:

- General Plan implementation would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable Federal or State ambient air quality standard during construction and operational activities.
- General Plan implementation would expose sensitive receptors to substantial pollutant concentrations during construction and operational activities.
- General Plan implementation would result in a cumulatively considerable contribution to significant cumulative air quality impacts with the potential to expose sensitive receptors to substantial pollutant concentrations.

Both Alternative 2 and the General Plan Update would provide opportunities for trip internalization and increased opportunities for walking and bicycling due to the proposed mix of higher density residential and commercial development. While land uses and development under Alternative 2 would be required to adhere to the same policy guidance and local, State, and regional air quality measures as the General Plan Update, the decrease in residential units, and the corresponding reduction in construction emissions, operational emission, and potential reductions in overall traffic volumes would result in reductions in air emissions under Alternative 2 when compared to the proposed General Plan Update. As such, Alternative

2 would be considered environmentally superior to the General Plan Update, although air quality impacts would remain significant and unavoidable.

Biological Resources

The Planning Area is urbanized and developed with residential and non-residential uses. The Planning Area consists primarily of developed and/or disturbed land that has been developed, paved, or landscaped, and existing vegetation consists of primarily ornamental and/or nonnative plant species. As described in Section 5.4, *Biological Resources*, the General Plan Update does not include any specific development proposals and would not result in significant direct impacts to existing biological resources. However, subsequent development projects under the proposed General Plan Update could result in direct impacts to certain species found present on an individual project site. Future development projects would be required to adhere to applicable Federal, State, and local regulations that provide for sensitive species as part of the discretionary approval process for site-specific development projects. Compliance with Federal, State, and local regulations, and implementation of General Plan Update policies and actions, would reduce potential impacts to sensitive species to a less than significant level.

Alternative 2 would result in similar development patterns to the General Plan Update, which could result in a less than significant impact to biological resources. The proposed General Plan Update and Alternatives 2 would also include updated biological policies and actions aimed at protecting biological resources (as described in detail in Section 5.4). Therefore, impacts to biological resources under Alternative 2 would remain the same when compared to the proposed General Plan Update. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Cultural Resources

As described in Section 5.5, *Cultural Resources*, while the General Plan Update does not directly propose site-specific development with the potential to directly impact cultural resources, future development associated with implementation of the General Plan Update could cause a substantial adverse change in the significance of known or unknown historic or archaeological resources. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan, Municipal Code, and other applicable State and local regulations relative to historic and potentially historic resources. The General Plan Update Resource Management Element includes goals, policies, and actions addressing heritage resources, including historical and archaeological resources. Compliance with the General Plan Update policies and actions and existing regulations, would not cause a substantial adverse change in the significance of a historical and/or cultural resource and impacts would be less than significant.

Alternative 2 would result in similar development patterns and a similar development footprint as the proposed Project. Additionally, Alternative 2 would update cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the proposed General Plan Update. The impact under Alternatives 2 would remain the same compared to the proposed Project. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Energy

As described in Section 5.6, *Energy*, buildout of the General Plan Update would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel), and from off-road construction activities (e.g. diesel fuel) associated with 2045 buildout of the General Plan Update. Buildout of the General Plan Update would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. Energy use impacts associated with the implementation of the General Plan Update would be less than significant.

While land uses and development under Alternative 2 would be required to adhere to the same policy guidance and local, State, and regional measures regulating energy usage as the General Plan Update, the decrease in residential units, and the corresponding reduction in electricity and gas for the operation of buildings, diesel fuel for off-road construction activities, and potential reductions in gasoline due to a decrease in the overall traffic volumes would result in reductions in energy usage under Alternative 2 when compared to the proposed General Plan Update. As such, Alternative 2 would be considered environmentally superior to the General Plan Update.

Geology and Soils

As described in Section 5.7, *Geology and Soils*, geology and soils impacts associated with the implementation of the General Plan Update would be less than significant. It is possible that undiscovered paleontological resources could be encountered during future ground-disturbing activities within the Planning Area. Future development associated with implementation of the General Plan Update would be required to assess the potential for development proposals to significantly impact paleontological resources pursuant to CEQA. If the project involves earthwork, the City may require a study conducted by a professional paleontologist to determine if paleontological assets are present, and if the project will significantly impact resources. If significant impacts are identified, the City may require the project to be modified to avoid impacting the paleontological materials, require monitoring of rock units with high potential to contain significant nonrenewable paleontological resources, or require mitigation measures to mitigate the impacts, such as recovering the paleontological resources for preservation. With implementation of the General Plan Update policies and actions, potential impacts to paleontological resources associated with future development anticipated by the General Plan Update would be reduced to less than significant.

Alternative 2 would result in similar development patterns to the General Plan Update. Since the Planning Area is the same under both development scenarios, similar physical constraints related to geology and soils exist. The potential for new development to expose people or structures to adverse effects associated with seismic ground shaking and geologic instabilities would be similar under this Alternative and the General Plan Update. Further, new development would be required to comply with the California Building Code and applicable Municipal Code requirements. The General Plan Update and Alternative 2 would also include updated policies related to geologic hazards, including requirements for project reviews and standards for construction and building practices, as well as updated policies related to mitigate potential impacts to paleontological resources (as described in detail in Section 5.7). Therefore, impacts under Alternative 2 related to Geology and Soils would generally remain the same as the General

Plan Update. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Greenhouse Gas Emissions

As described in Section 5.8, *Greenhouse Gas Emissions,* the proposed Project would be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions, and implementation of the General Plan Update's goals, policies and actions would reduce GHG emissions. However, development projects associated with implementation of the proposed Project, would potentially generate emissions inconsistent with the State's long-term goals for reducing GHG emissions in the State of California, particularly the net-zero target as promulgated under AB 1279. As such, the City cannot state with certainty whether implementation of the General Plan Update would meet the State's community emissions target. Therefore, the proposed Project would have a cumulatively significant and unavoidable adverse impact in regards to greenhouse gas emissions.

Under Alternative 2, the Planning Area would be developed with similar uses as the General Plan Update, but the potential increase in total housing units and population would be reduced. The reduced residential development potential and resulting population may decrease total greenhouse gas emissions when compared to the General Plan Update. The General Plan Update and Alternative 2 include a range of goals and policies that would reduce GHG emissions, including policies to encourage mixed-use development, complete streets, and multi-modal improvements that would further reduce per capita and per employee GHG impacts. Both the General Plan Update and Alternative 2 present more opportunities for trip internalization and increased opportunities for walking and bicycling due to their proposed mix of higher density residential and commercial development. However, the greenhouse gas emissions impact would be decreased slightly under Alternative 2 when compared to the proposed General Plan Update. As such, Alternative 2 would be considered environmentally superior to the General Plan Update, although GHG impacts would remain significant and unavoidable.

Hazards and Hazardous Materials

As described in Section 3.9, *Hazards and Hazardous Materials*, all impacts related to hazardous materials, aircraft hazards, and emergency response were found to be less than significant.

The General Plan Update and Alternative 2 would include updated policies and actions aimed at protecting the public from hazardous materials. These policies and actions in the General Plan Update would ensure that potential hazards are identified on a project site, that development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and that business operations comply with Federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The General Plan Update also includes policies and actions to ensure that the City has adequate emergency response plans and measures to respond in the event of an accidental release of a hazardous substance (as described in detail in Section 5.9).

Similar to the General Plan Update, Alternative 2 would result in additional urban uses including commercial and residential development. Impacts related to hazards and hazardous materials and emergency response under Alternative 2 would remain the same when compared to the proposed

General Plan Update. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Hydrology and Water Quality

As described in Section 5.10, *Hydrology and Water Quality*, under all impact areas, implementation of the General Plan Update would result in less than significant impacts related to Hydrology and Water Quality.

While this Alternative would result in less dense development compared to the General Plan Update, all new development would be subject to applicable stormwater and water quality requirements per the Los Angeles RWQCB. This variation in intensity and land use designation changes would not substantially alter impacts from or to flooding, water quality, or on groundwater supplies because existing Federal, State, and local regulations would apply to guard against flood hazards, water quality contamination, or impact on groundwater supplies. Potential hydrology and water quality impacts for this alternative, like the proposed Project, would be less than significant.

Alternative 2 would result in slightly reduced development of housing units when compared to the General Plan Update. Compared to the General Plan Update, the potential water quality impacts related to construction and operation would be similar. As described in Section 5.10, implementation of the General Plan Update would not result in construction, or long-term impacts to surface water quality from urban stormwater runoff. Future development under all alternatives would also be required to submit a SWPPP with BMPs to the RWQCB and comply with all storm water sewer system (MS4) requirements. It would be expected that impacts related to water quality would be similar under Alternative 2 as compared to the General Plan Update. As such, Alternative 2 would be neither environmentally superior nor inferior to the General Plan Update.

Land Use and Planning

The proposed General Plan Update and Alternative 2 are long-range land use plans. As described in Section 5.11, *Land Use and Planning*, all impacts related to land use and planning were found to be less than significant under the General Plan Update. As described previously, the General Plan Update and Alternative 2 would include adoption of the updated policy document. This Alternative would prevent the City from achieving some of the core objectives of the General Plan Update to meet new State requirements and accommodating the City's RHNA allocation as identified in the City's 2021-2029 Housing Element. This Alternative would result in inconsistency between the General Plan Elements, and would require amendments to the 2021-2029 Housing Element to provide consistency. In addition, the General Plan Update would allow for greater consistency with applicable State and regional plans related to the provision of housing options at varying densities and income levels within an area served by transit, retail, and services to provide opportunities to reduce VMT and associated GHG emissions when compared to Alternative 2. As such, Alternative 2 would be considered environmentally inferior to the General Plan Update.

Mineral Resources

As described in Section 5.12, *Mineral Resources*, the General Plan Update would result in no impacts relating to mineral resources. Like the General Plan Update, Alternative 2 would accommodate development generally in the same areas, and these areas are already urbanized. Given that no mineral

resources would be impacted by the proposed Project, impacts associated with Alternative 2 would be the same and would remain less than significant. As such, Alternative 2 would be neither environmentally superior nor inferior to the General Plan Update.

Noise

As described in Section 5.13, *Noise*, while the General Plan Update does not directly propose site-specific development, future development associated with implementation of the General Plan Update could generate additional noise from construction and operational activities associated with future projects. Where future development projects under the General Plan Update may be exposed to noise levels that exceed the land use compatibility criteria, such as residential developments within the Hawthorne Boulevard Specific Plan area or sensitive land uses developed adjacent to the existing rail line, impacts could be mitigated to a level that is less than significant with the implementation of noise control measures, such as relocating residential outdoor recreational areas away from 60 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Additionally, the General Plan Update Public Safety Element includes policies and actions intended to minimize exposure to excessive noise, including noise associated with traffic, stationary noise sources, and construction noise.

Alternative 2 would result in similar development patterns and a similar development footprint as the General Plan Update. Alternative 2 would allow for less development (1,603 fewer housing units), resulting in a corresponding reduction in construction and operational noise. The decrease in residential units and non-residential building square footage, and the corresponding reduction in overall traffic volumes would result in reductions in roadway noise under Alternative 2 when compared to the proposed General Plan Update. As such, Alternative 2 would be considered environmentally superior to the General Plan Update.

Population and Housing

Similar to the General Plan Update, this Alternative would update the City's environmental baseline conditions and development projections through 2045. As shown in Table 7-3, the Reduced Growth Alternative would anticipate 1,603 fewer residential units compared to the General Plan Update, which would result in 3,639 less residents compared to Alternative 2. Both the General Plan Update and Reduced Growth Alternative account for population growth and establish goals and policies to reduce potential growth-related impacts. The net increase in population and housing is nominal and would result in similar less than significant impacts.

The amount and typology of allowable development under the General Plan Update and Alternative 2 has been crafted to meet City's Regional Housing Needs Allocation (RHNA) for future housing needs. While Alternative 2 would provide sufficient development capacity to accommodate the City's RHNA, the development assumption in the City's adopted 2021-2029 Housing Element would need to be updated to assume that each housing opportunity site would be developed at the maximum allowable density and the City would be required to prove in the Housing Element based on substantial evidence that development at this density allowed under Alternative 2 would be feasible.

Given the limited development history of similar projects in the City, it would be challenging to provide the evidence required to prove development of each housing opportunity site at maximum allowable

density. If the State does not approve the City's analysis, the State may withdraw certification of the City's Housing Element, even if sufficient development capacity is provided to accommodate its RHNA. However, since the lower density does not preclude the City from meeting it's RHNA obligations, impacts associated with Alternative 2 would be the same and would remain less than significant. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Public Services and Recreation

As described in Section 5.15, *Public Services* and Section 5.16, *Parks and Recreation*, the General Plan Update would result in less than significant impacts relating to public services, parks and recreation. New development would place increased demands on public services such as police, fire, schools, parks, libraries, and other governmental services. The General Plan Update includes policies and actions and compliance with the Municipal Code would require payment of impact fees to the City and other public agencies to ensure that additional development allowed does not have adverse impacts on these services and agencies.

Under Alternative 2, the development area and development types would remain similar, however, there would be slightly fewer jobs, dwelling units, and reduced population increase when compared to the General Plan Update and thus, impacts to public services (the demand for police, fire and other public services) would be slightly reduced. Overall, Alternative 2 would have a slightly reduced impact to public services when compared to the proposed Project. As such, Alternative 2 is considered environmentally superior to the General Plan Update.

Transportation

As described in Section 5.17, *Transportation*, transportation impacts associated with implementation of the General Plan Update would be less than significant. The proposed Project would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities or the performance or safety of those facilities. The Project includes goals, policies and actions to encourage new and improved facilities to support multi-modal transportation and access within the Planning Area. Similarly, Alternative 1 would provide for increased density and development within the Planning Area and would not conflict with policies, plans, or programs regarding roadways, bicycle, pedestrian, or transit facilities or the performance or safety of those facilities.

Alternative 2 also includes a more balanced mix of uses and additional opportunities for increased densities as part of mixed-use developments which includes opportunities for trip internalization, and increased opportunities for walking and bicycling. Overall, Alternative 2 would slightly reduce densities as part of mixed-use developments when compared to the General Plan Update, therefore this alternative would have slightly increased impacts relative to per capita VMT when compared to the General Plan Update. As such, Alternative 2 is considered environmentally inferior to the General Plan Update.

Tribal Cultural Resources

As described in Section 5.18, *Tribal Cultural Resources*, while the General Plan Update does not directly propose site-specific development with the potential to directly impact tribal cultural resources, future development associated with implementation of the General Plan Update could cause a substantial adverse change in the significance of known or unknown tribal cultural resources. Potential impacts to

tribal cultural resources associated with future development would be reduced through implementation of General Plan Update policies and actions. Subsequent development and infrastructure projects would be analyzed for potential environmental impacts, consistent with the requirements of CEQA, pursuant to the City's entitlement review process. Subsequent discretionary projects implemented in accordance with the General Plan Update would be subject to the provisions of AB 52 and may require tribal consultation with California Native American tribes that are traditionally and culturally affiliated with the Planning Area and who have previously requested AB 52 consultations with the City. Future AB 52 consultations may identify tribal cultural resources not yet found and formally recorded that could be impacted by subsequent projects. Compliance with the General Plan Update policies and actions and existing regulations would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be less than significant.

Alternative 2 would result in similar development patterns and a similar development footprint as the proposed General Plan Update. Additionally, Alternative 2 would update tribal cultural resource policies to include new policies and actions related to agency coordination, consultation, and monitoring consistent with the proposed General Plan Update. Potential impacts to tribal cultural resources would be the same under Alternative 2 and the proposed General Plan Update. As such, Alternative 2 is considered neither environmentally superior nor inferior to the General Plan Update.

Utilities and Service Systems

As described in Section 5.19, *Utilities and Service Systems*, the General Plan Update would result in less than significant impacts relating to utilities and service systems.

New development would place increased demands on utilities. Under Alternative 2, the Planning Area would be developed with similar development patterns and uses as the General Plan Update, however, the overall residential density increases would be reduced. The quantity of infrastructure installed would not be substantially reduced, as the Project Area is urbanized and contains existing utilities infrastructure.

The potential environmental effects associated with infrastructure projects would be similar under Alternative 2 and the proposed Project. Similarly, storm drainage runoff under Alternative 2 would be approximately the same when compared to the proposed Project, due to the general development footprint remaining the same for this alternative when compared to the General Plan Update. Since demand for utilities would be slightly less under Alternative 2 due to the lower densities and associated development potential, Alternative 1 would be considered environmentally superior to the General Plan Update.

Wildfire

As described in Section 5.20, *Wildfire*, the Planning Area is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; the General Plan Update would result in no impacts related to wildfire. Like the General Plan Update, Alternative 2 would accommodate development generally in the same areas, and these areas are already urbanized. Given that the Planning Area is not located in an area of high fire hazard potential, impacts associated with Alternative 2 would be the same and no impacts would occur. As such, Alternative 2 would be neither environmentally superior nor inferior to the General Plan Update.

Irreversible Effects

The proposed Project would have a less than significant impact associated with irreversible environmental effects as described in Section 6.0, *Other CEQA Considerations*. Implementation of the General Plan Update would result in a commitment of land uses designated for the foreseeable future. Land use and development consistent with the Project would result in irretrievable commitments by designating land for development that is more intense, in some instances, than current designations allow. Additionally, residential development would be allowed on land not currently designated for residential development. Development would physically change the environment in terms of aesthetics, air emissions, noise, and traffic. Therefore, the Project would result in changes in land use within the Planning Area that would commit future generations to these uses. Construction and operation of future development projects associated with Project implementation would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources that would limit the availability of these resource quantities for future generations or for other uses during the life of the Project. However, the Planning Area is an urbanized area and already uses such resources. Additionally, the continued use of such resources would be on a relatively small scale in a regional context. As such, although irreversible environmental changes would result from the Project, such changes would not be considered significant.

During the planning horizon, development under Alternative 2 would be reduced in comparison to the General Plan Update. Under cumulative conditions, Alternative 2 would result in less housing units (see Table 7-1). Alternative 2 would use nonrenewable resources, including metals, stone, and other materials related to construction, and result in on-going demand for fossil fuels and other resources associated with energy production at levels lower than the proposed Project. Alternative 2 would have slightly reduced impacts in comparison to the General Plan Update due to reduced development levels. As such, Alternative 2 would be considered environmentally superior to the General Plan Update.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an environmentally superior alternative be identified among the alternatives that are analyzed in the EIR. If the No Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative is that alternative with the least adverse environmental impacts when compared to the General Plan Update.

A comparative analysis of the General Plan Update and each of the Project alternatives is provided in Table 7-4, *Comparison of Alternatives*, below. As shown in Table 7-4, Alternative 2 (Reduced Growth Alternative) is the environmentally superior alternative when looked at in terms of all potential environmental impacts. While it would not eliminate the General Plan Update's significant and unavoidable impacts, Alternative 2 would lessen the majority of the environmental impacts associated with the proposed Project. Both alternatives fail to reduce any significant and unavoidable impacts to a less than significant level.

Table 7-4
Comparison of Alternatives

Environmental Issue	Alternative 1 (No Project)	Alternative 2 (Reduced Growth)
Aesthetics	⮝	=
Agricultural Resources	=	=
Air Quality	⮟*	⮟*
Biological Resources	⮝	=
Cultural Resources	⮝	=
Energy	⮟	⮟
Geology and Soils	⮝	=
Greenhouse Gas Emissions	⮟*	⮟*
Hazards and Hazardous Materials	⮝	=
Hydrology and Water Quality	=	=
Land Use and Planning	⮝	⮟
Mineral Resources	=	=
Noise	⮟	⮟
Population and Housing	⮝	=
Public Services and Recreation	⮟	⮟
Transportation	=	⮝
Tribal Cultural Resources	⮝	=
Utilities and Services Systems	⮟	⮟
Wildfire	=	=
Irreversible Effects	⮟	⮟

Notes:
⮝ Indicates an impact that is greater than the Project (environmentally inferior).
⮟ Indicates an impact that is less than the Project (environmentally superior).
= Indicates an impact that is equal to the Project (neither environmentally superior nor inferior).
* Indicates a significant and unavoidable impact.

8.0 REPORT PREPARERS

8.1 LEAD AGENCY

City of Lawndale
14717 Burin Avenue
Lawndale, CA, 90260

Sean Moore, City Manager
Jared Chavez, Planning Manager
Jose Hernandez, Associate Planner

8.2 PREPARERS OF THE ENVIRONMENTAL IMPACT REPORT

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

Amanda Tropiano, Principal/Project Manager
Ben Ritchie, Principal
Starla Barker, AICP, Principal Planner
Ashley Brodkin, Senior Planner
Josh Smith, AICP, Senior Planner
Erik Anderson, Associate Planner

Kittelson & Associates, Inc.
750 The City Drive, Suite 410
Orange, CA 92868

Tim Erney, AICP, PTP, Senior Principal Planner
Fernando Sotelo, TE, Associate Engineer

MD Acoustics, LLC
1197 Los Angeles Avenue, Ste. C-256
Simi Valley, CA 93065

Claire Pincock, INCE-USA
Rachel Edelman

Duke Cultural Resources Management, LLC
18 Technology Drive, Ste. 103
Irvine, CA 92618

Curt Duke, M.A.
Edgar Alvarez, B.A.
Nicholas F. Hearth, M.A.
Benjamin Scherzer, M.S.

Attachment G

Draft (EIR) Appendices

PUBLIC REVIEW DRAFT

ENVIRONMENTAL IMPACT REPORT (APPENDICES)

FOR THE

LAWNDALE GENERAL PLAN UPDATE

(SCH: 2022120088)

AUGUST 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

PUBLIC REVIEW DRAFT
ENVIRONMENTAL IMPACT REPORT
(APPENDICES)

FOR THE

LAWNDALE GENERAL PLAN UPDATE
(SCH: 2022120088)

AUGUST 2023

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260
JChavez@lawndalecity.org
310-973-3206

Prepared by:

De Novo Planning Group
180 East Main Street, Suite 108
Tustin, CA 92780

Appendix A: NOP and NOP Comment Letters

ORIGINAL FILED
DEC 06 2022
LOS ANGELES, COUNTY CLERK

Notice of Preparation and Scoping Meeting
Lawndale General Plan Update Environmental Impact Report

Date:	December 6, 2022
To:	State Clearinghouse, Agencies, Organizations and Interested Parties
Subject:	Notice of Preparation and Scoping Meeting for the Lawndale General Plan Update Environmental Impact Report
Scoping Meeting:	Thursday, December 15, 2022, 6:30 p.m. to 7:30 p.m. Harold E. Hofmann Community Center 14700 Burin Avenue, 2nd Floor Lawndale, CA 90260
Comment Period:	Tuesday, December 6, 2022 to Thursday, January 5, 2023

NOTICE IS HEREBY GIVEN that the City of Lawndale (City) will prepare an Environmental Impact Report (EIR) for the City of Lawndale General Plan Update (Project). The City is the lead agency for the Project. The purpose of this notice is to: (1) serve as a Notice of Preparation (NOP) of an EIR pursuant to the State California Environmental Quality Act (CEQA) Guidelines § 15082; (2) advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project; and (3) notice the public scoping meeting.

The City determined that the proposed Project would require preparation of a full-scope EIR; thus, an Initial Study was not prepared in conjunction with this NOP. Consistent with § 15082(b) of the CEQA Guidelines, the City will prepare an EIR to address the environmental impacts associated with the Project at a programmatic level. The proposed Project is a long-term plan consisting of policies that will guide future development activities and City actions. No specific development projects are proposed as part of this General Plan Update. However, the program EIR can serve to streamline environmental review of future projects.

Information regarding the project description, project location, and topics to be addressed in the Draft EIR is provided below. Additional information on the General Plan Update and Program EIR are available at the City of Lawndale, Community Development Department, located at 14717 Burin Avenue, Lawndale, CA 90260, and on-line at: www.lawndale.generalplan.org.

For questions regarding this notice, please contact Jared Chavez, Community Development Manager at (310) 973-3231, or by email: jchavez@lawndalecity.org.

Notice of Preparation Comment Period: The City, as Lead Agency, requests that responsible and trustee agencies, all interested parties, and the Office of Planning and Research, respond in a manner consistent with § 15082(b) of the CEQA Guidelines. Pursuant to Public Resources Code § 21080.4, responsible

agencies, trustee agencies and the Office of Planning and Research must submit any comments in response to this notice no later than the comment period deadline identified below. In accordance with the time limits established by CEQA, the NOP public review period will begin on Tuesday, December 6, 2022 and end on Thursday, January 5, 2023.

In the event that the City does not receive a response from any Responsible or Trustee Agency, or by any interested parties, by the end of the review period, the City may presume that the Responsible Agency, Trustee Agency, or interested party has no response to make (State CEQA Guidelines Section 15082(b)(2)). Comments in response to this notice must be submitted to the address below, or by email by the close of the NOP review period, which is 5:00 PM on Thursday, January 5, 2023:

Jared Chavez - Community Development Manager
City of Lawndale
14717 Burin Ave.
Lawndale, CA 90260
Email: jchavez@lawndalecity.org

Scoping Meeting

The City will hold a scoping meeting to provide an opportunity for agency representatives and the public to assist the City in determining the scope and content of the EIR. The scoping meeting will be held on **Thursday, December 15, 2022, at 6:30 p.m.** The scoping meeting will not discuss the merits of the Project, but rather the environmental topics to be included in the environmental review. The location of the meeting is as follows:

Harold E. Hofmann Community Center
14700 Burin Avenue, 2nd Floor
Lawndale, CA 90260

Public Agency Approvals

The City Council is the final decision-making body for the General Plan Update. Before the City Council considers the proposed Project, the Planning Commission will review it and make recommendations to the City Council. While other agencies may be consulted during the General Plan Update process, their approval is not required for adoption of the General Plan. However, subsequent development under the General Plan Update may require approval of state, federal and responsible trustee agencies that may rely on the programmatic EIR for decisions in their areas of expertise.

Project Location and Setting

As shown on Figure 1, the City of Lawndale is located in the South Bay portion of Los Angeles County, approximately 10 miles southwest of downtown Los Angeles. Lawndale is bounded by the City of Hawthorne to the north and west, by unincorporated areas of Los Angeles County and the City of Gardena to the east, by the City of Torrance to the south, and by the City of Redondo Beach to the south and west. Regional access to the City is provided by Interstate 405, a major north-south highway which provides access to Lawndale and the greater Los Angeles region.

The Planning Area is the geographic area for which the Plan provides a framework for long-term growth and resource conservation. State law requires the Plan to include all territory within Lawndale's incorporated area as well as "any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (California Government Code Section 65300). The Planning Area, as shown in Figure 2, includes the entire city limits (approximately 917 acres) as well as the City of Lawndale's Sphere of Influence (approximately 229 acres); the entire Planning Area is approximately 1,146 acres.

Project Description

State law requires the City to adopt a comprehensive, long-term general plan for the physical development of its planning area. The General Plan must include land use, circulation, housing, conservation, open space, air quality, noise, safety, and environmental justice elements, as specified in Government Code Section 65302, to the extent that the issues identified by State law exist in the City's planning area. Additional elements that relate to the physical development of the City may also be addressed in the General Plan. The degree of specificity and level of detail of the discussion of each General Plan Element need only reflect local conditions and circumstances. The City of Lawndale is preparing a comprehensive update to its existing General Plan. The General Plan is being prepared to address the requirements of State law and the relevant items addressed in Government Code Section 65300 et seq. The Lawndale General Plan will include all of the State-mandated elements, and will address two optional topics: Economic Development and Community Facilities.

The updated Lawndale General Plan is expected to be adopted in 2023 and will guide the City's development and conservation through land use objectives and policy guidance. The General Plan is intended to be an expression of the community's vision for the City and Planning Area and constitutes the policy and regulatory framework by which future development projects will be reviewed and public improvements will be implemented. The Lawndale General Plan will include a comprehensive set of goals, policies, and actions (implementation measures), as well as a revised Land Use Map (Figure 3). The revisions to the Land Use Map will include review and revision of the land uses within the existing Hawthorne Boulevard Specific Plan area. The City will implement the General Plan by requiring development, infrastructure improvements, and other projects to be consistent with its policies and by implementing the actions included in the General Plan.

A goal in the General Plan is the broadest statement of community values. It is a generalized ideal which provides a sense of direction for action. They are overall statements of desired future conditions. The essence of the General Plan is contained within its policies. Policies are statements which further refine the goals, and guide the course of action the City must take to achieve the goals in the General Plan. It is important to note that policies are guides for decision makers, not decisions themselves. Action items are steps or actions the City should take to implement the General Plan.

The Lawndale General Plan Update is intended to reflect the desires and vision of Lawndale residents, businesses, the Planning Commission, and City Council. The following objectives were identified for the proposed update to the General Plan:

1. Reflect the current goals and vision expressed by city residents, businesses, decision-makers, and other stakeholders;
2. Address issues and concerns identified by city residents, businesses, decision-makers, and other stakeholders;
3. Protect Lawndale's existing residences, character, and sense of community;
4. Proactively plan for and accommodate local and regional growth in a responsible manner;
5. Encourage mixed-use development patterns that promote vibrant commercial and residential areas;
6. Allow for a range of high-quality housing options;
7. Attract and retain businesses and industries that provide jobs for local residents;
8. Continue to maintain and improve multimodal transportation opportunities;
9. Maintain strong fiscal sustainability and continue to provide efficient and adequate public services;
10. Address new requirements of State law; and
11. Address emerging transportation, housing, and employment trends.

General Plan Buildout Summary

The EIR will evaluate the anticipated development that could occur within the Planning Area if every parcel developed at the densities and intensities expected under the General Plan. While no specific development projects are proposed as part of the Lawndale General Plan Update, the General Plan will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. The buildout analysis assumes a 20-year planning horizon, and 2045 is to be the full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation).

Table 1 provides a statistical summary of the buildout potential associated with the Proposed Land Use Map compared to existing on-the-ground conditions and the currently adopted General Plan. Table 1 also shows the buildout potential associated with updated land uses within the Hawthorne Boulevard Specific Plan area.

Table 1 Buildout Statistical Summary

Description	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs
Existing Conditions				
HBSP	391	1,125	2,174,447	3,424
City	9,501	31,084	2,126,587	2,703
SOI	1,571	5,740	241,129	343
Total	**11,463**	**38,948**	**4,542,162**	**8,470**
Current Land Use Map				
HBSP	1,331	3,620	2,063,401	4,125
City	10,338	28,746	2,541,429	3,763
SOI	1,717	6,286	446,149	829
Total	**13,386**	**38,652**	**5,070,979**	**8,717**
Proposed Land Use Map				
HBSP	3,931	11,017	2,484,823	4,970
City	9,757	30,127	2,420,054	3,409
SOI	1,717	6,286	446,149	829
Total	**15,405**	**47,430**	**5,351,026**	**9,208**

HBSP – Hawthorne Boulevard Specific Plan Area
City – Development outside of the HBSP Area but within the City limits
SOI – Sphere of Influence
Total – Planning Area

Notes:

1. *The statistical summary is based a 20-year planning horizon and buildout year (the point at which all parcels in the City are developed according to their General Plan land use designation).*
2. *Numbers have been rounded and may not add exactly.*
3. *HBSP is located within the City limits.*

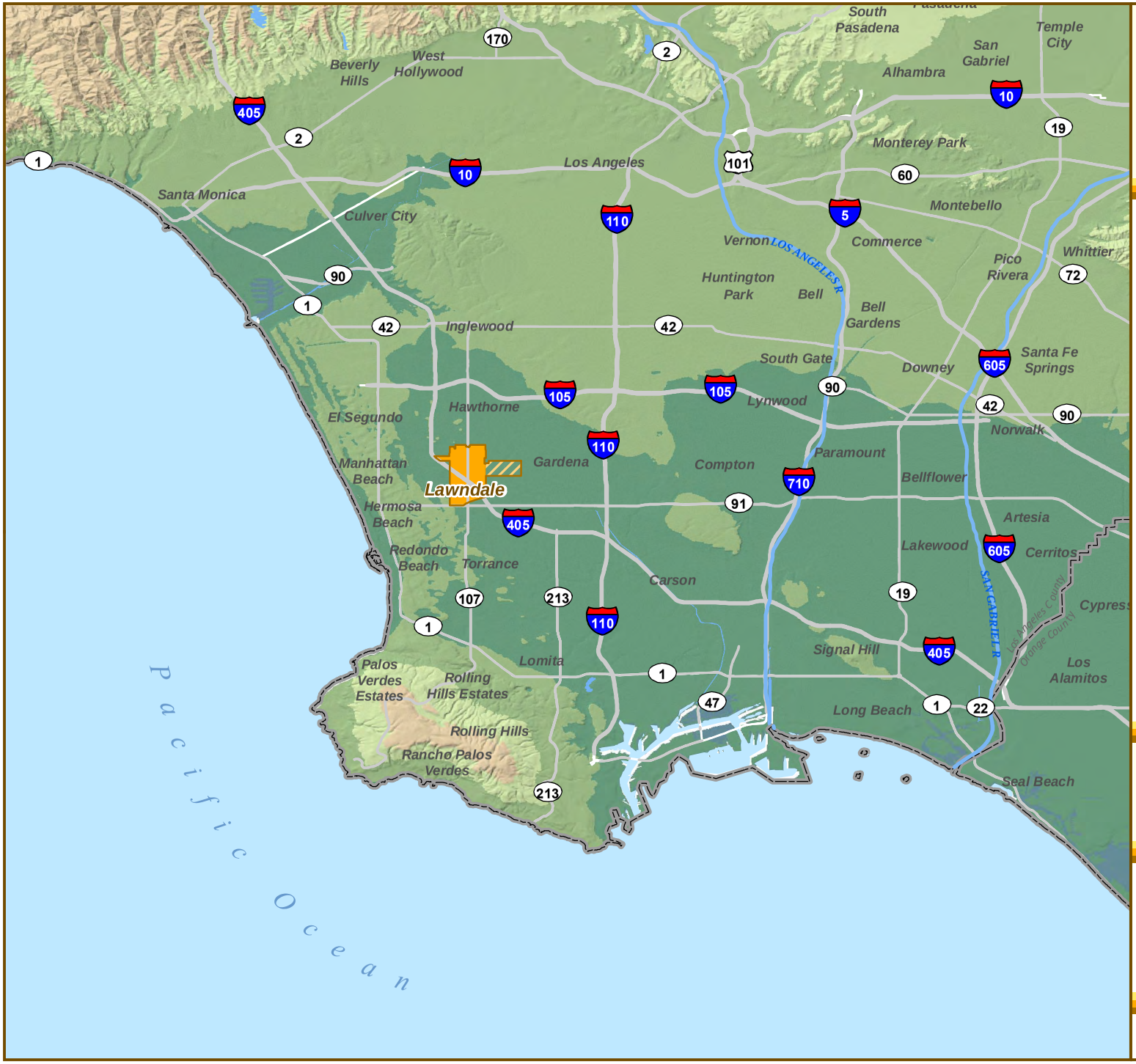
Environmental Factors Potentially Affected

The proposed Project could potentially affect the following environmental factors, and each will be addressed in the EIR:

- Aesthetics
- Air Quality
- Agriculture and Forestry Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gases Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Parks and Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfires
- Mandatory Findings of Significance

Attachments

- Figure 1: Regional Location Map
- Figure 2: Planning Area Map
- Figure 3: Proposed General Plan Land Use Map



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 1. Regional Location Map

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- County Boundary

0 2 4
Miles

Sources: California State Geoportal.
Date: November 18, 2022.

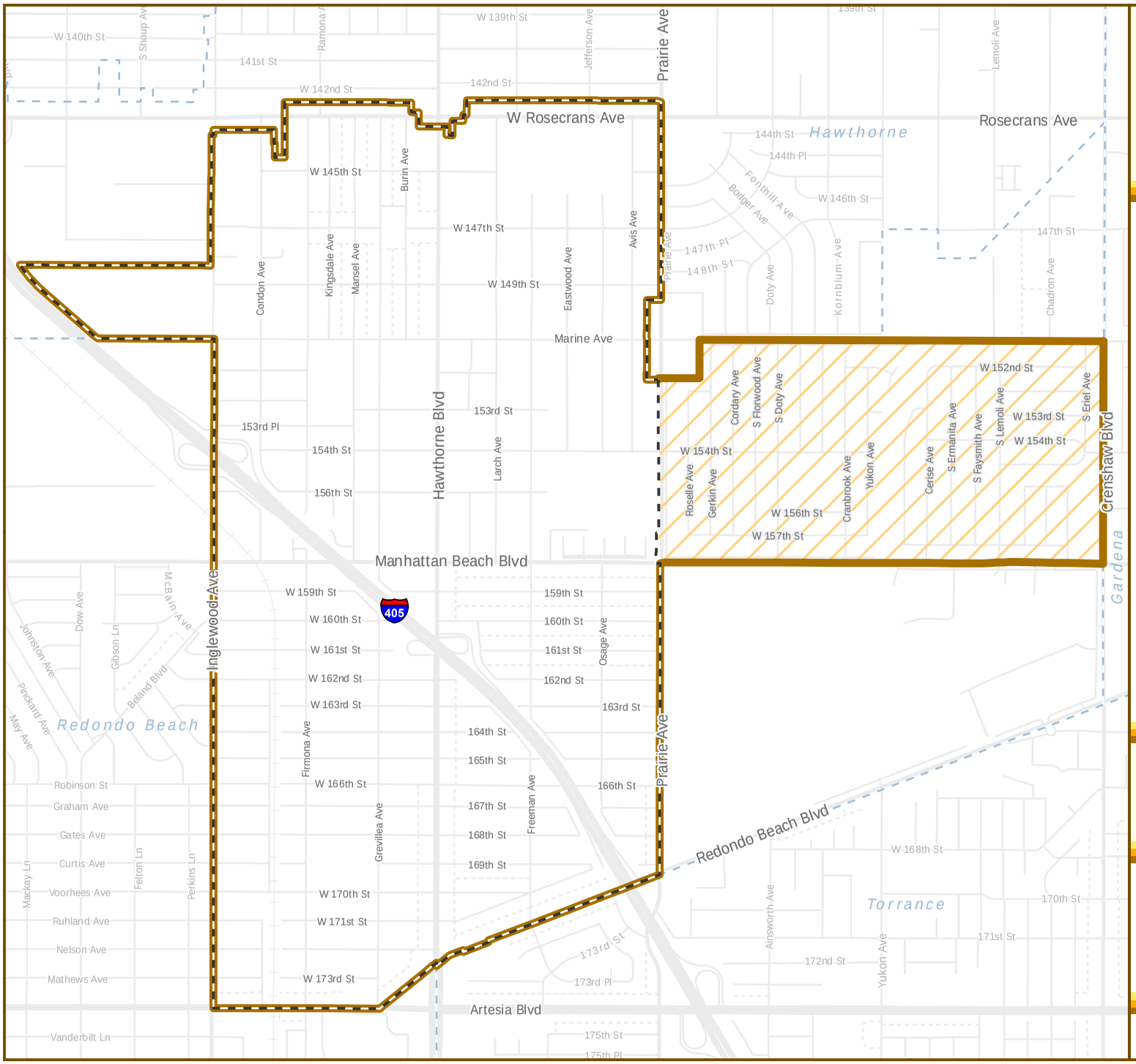
City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 2.
Planning Area



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Inorporated Area

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: November 18, 2022.

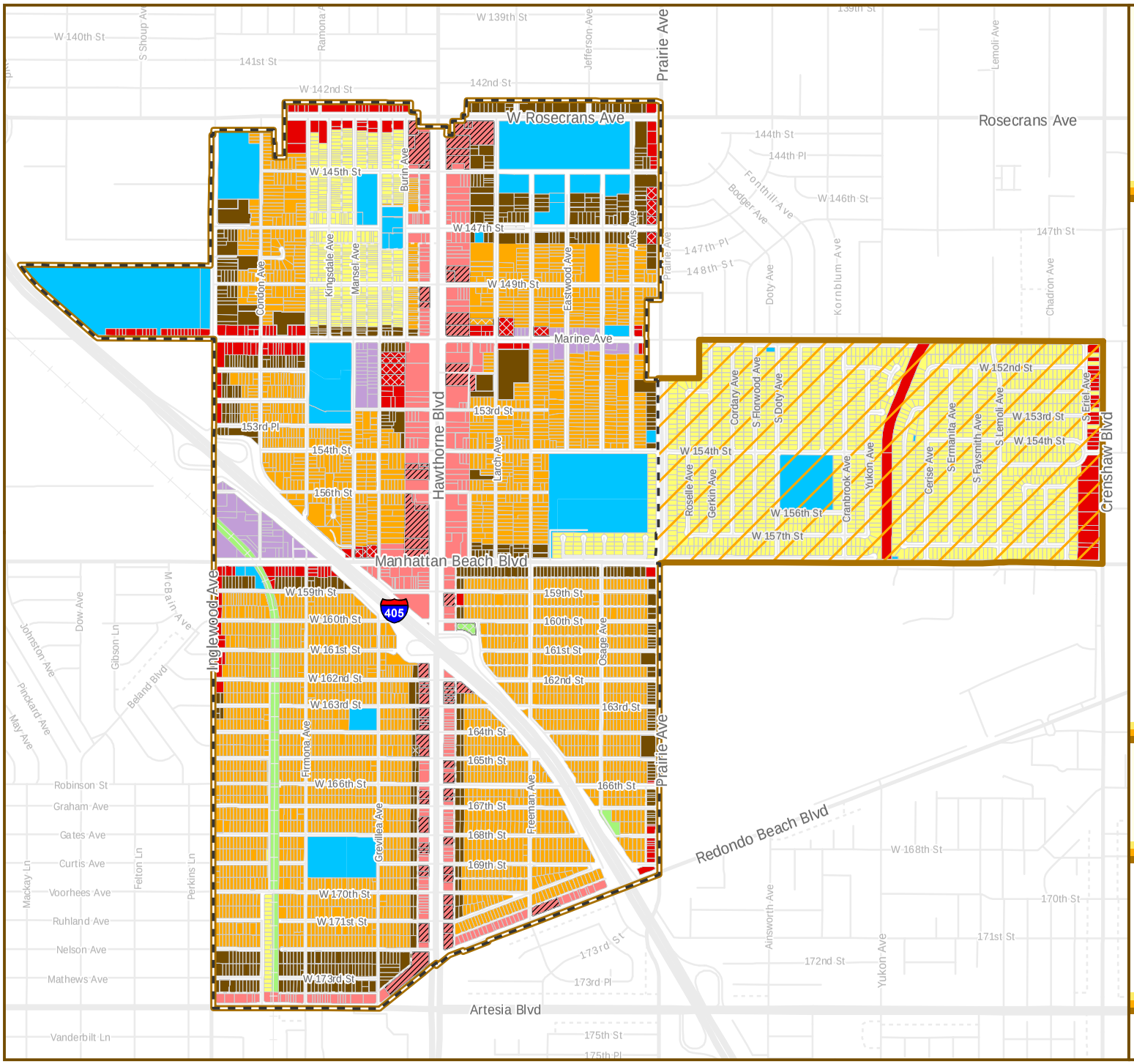
City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3. Proposed General Plan Land Use Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Assessor Parcel Boundary
- Housing Overlay
- Housing Overlay
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- HBSP
- Industrial
- Open Space
- Public Facilities

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: November 18, 2022.

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

NATIVE AMERICAN HERITAGE COMMISSION

RECEIVED
DEC 19 2022
BY:

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 6, 2022

Jared Chavez
City of Lawndale
14717 Burin Avenue
Lawndale, CA 90260

Re: 2022120088, City of Lawndale General Plan Update Project, Los Angeles County

Dear Mr. Chavez:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes thot have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative decloration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigotion that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse

SCAG
INNOVATING FOR A BETTER TOMORROW

SOUTHERN CALIFORNIA
ASSOCIATION OF GOVERNMENTS
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017
T: (213) 236-1800
www.scag.ca.gov

REGIONAL COUNCIL OFFICERS

President
Jan C. Harnik, Riverside County Transportation Commission

First Vice President
Art Brown, Buena Park

Second Vice President
Curt Hagman, County of San Bernardino

Immediate Past President
Clint Lorimore, Eastvale

COMMITTEE CHAIRS

Executive/Administration
Jan C. Harnik, Riverside County Transportation Commission

Community, Economic & Human Development
Frank Yokoyama, Cerritos

Energy & Environment
Deborah Robertson, Rialto

Transportation
Ray Marquez, Chino Hills

December 28, 2022

Jared Chavez, Community Development Manager
City of Lawndale, Community Development Department
14717 Burin Avenue
Lawndale, California 90260
Phone: (310) 973-3231
E-mail: jchavez@lawndalecity.org

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Lawndale General Plan Update [SCAG NO. IGR10798]

Dear Jared Chavez,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Lawndale General Plan Update ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is responsible for providing informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG's adopted regional plans, to be determined by the lead agencies.[1]

Pursuant to Senate Bill (SB) 375, SCAG is the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS). SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals and align with RTP/SCS policies. Finally, SCAG is the authorized regional agency for Intergovernmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Lawndale General Plan Update in Los Angeles County. The proposed project includes a comprehensive update to all the State-mandated elements and will address two optional topics: Economic Development and Community Facilities.

When available, please email environmental documentation to IGR@scag.ca.gov providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Intergovernmental Review (IGR) Program, attn.: Annaleigh Ekman, Associate Regional Planner, at (213) 630-1427 or IGR@scag.ca.gov. Thank you.

Sincerely,

Frank Wen, Ph.D.
Manager, Planning Strategy Department

[1] Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2020 RTP/SCS (Connect SoCal) for the purpose of determining consistency for CEQA.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE LAWNDALE GENERAL PLAN UPDATE [SCAG NO. IGR10798]

CONSISTENCY WITH CONNECT SOCAL

SCAG provides informational resources to facilitate the consistency of the proposed project with the adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS or Connect SoCal). For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with Connect SoCal.

CONNECT SOCAL GOALS

The SCAG Regional Council fully adopted Connect SoCal in September 2020. Connect SoCal, also known as the 2020 – 2045 RTP/SCS, builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. The goals included in Connect SoCal may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project. Among the relevant goals of Connect SoCal are the following:

SCAG CONNECT SOCAL GOALS	
Goal #1:	*Encourage regional economic prosperity and global competitiveness*
Goal #2:	*Improve mobility, accessibility, reliability and travel safety for people and goods*
Goal #3:	*Enhance the preservation, security, and resilience of the regional transportation system*
Goal #4:	*Increase person and goods movement and travel choices within the transportation system*
Goal #5:	*Reduce greenhouse gas emissions and improve air quality*
Goal #6:	*Support healthy and equitable communities*
Goal #7:	*Adapt to a changing climate and support an integrated regional development pattern and transportation network*
Goal #8:	*Leverage new transportation technologies and data-driven solutions that result in more efficient travel*
Goal #9:	*Encourage development of diverse housing types in areas that are supported by multiple transportation options*
Goal #10:	*Promote conservation of natural and agricultural lands and restoration of habitats*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG CONNECT SOCAL GOALS		
	Goal	Analysis
Goal #1:	*Encourage regional economic prosperity and global competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
Goal #2:	*Improve mobility, accessibility, reliability and travel safety for people and goods*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

Connect SoCal Strategies

To achieve the goals of Connect SoCal, a wide range of land use and transportation strategies are included in the accompanying twenty (20) technical reports. Of particular note are multiple strategies included in Chapter 3 of Connect SoCal intended to support implementation of the regional Sustainable Communities Strategy (SCS) framed within the context of focusing growth near destinations and mobility options; promoting diverse housing choices; leveraging technology innovations; supporting implementation of sustainability policies; and promoting a Green Region. To view Connect SoCal and the accompanying technical reports, please visit the Connect SoCal webpage. Connect SoCal builds upon the progress from previous RTP/SCS cycles and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that helps the SCAG region strive towards a more sustainable region, while meeting statutory requirements pertinent to RTP/SCSs. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

SCAG staff would like to call your attention to resources available from SCAG's Regional Climate Adaptation Framework including the Southern California Climate Adaptation Planning Guide, Communication and Outreach Toolkit, Library of Model Policies, and SB 379 Compliance Curriculum for Local Jurisdictions.

DEMOGRAPHICS AND GROWTH FORECASTS

A key, formative step in projecting future population, households, and employment through 2045 for Connect SoCal was the generation of a forecast of regional and county level growth in collaboration with expert demographers and economists on Southern California. From there, jurisdictional level forecasts were ground-truthed by subregions and local agencies, which helped SCAG identify opportunities and barriers to future development. This forecast helps the region understand, in a very general sense, where we are expected to grow, and allows SCAG to focus attention on areas that are experiencing change and may have increased transportation needs. After a year-long engagement effort with all 197 jurisdictions one-on-one, 82 percent of SCAG's 197 jurisdictions provided feedback on the forecast of future growth for Connect SoCal. SCAG also sought feedback on potential sustainable growth strategies from a broad range of stakeholder groups – including local jurisdictions, county transportation commissions, other partner agencies, industry groups, community-based organizations, and the general public. Connect SoCal utilizes a bottom-up approach in that total projected growth for each jurisdiction reflects feedback received from jurisdiction staff, including city managers, community development/planning directors, and local staff. Growth at the neighborhood level (i.e., transportation analysis zone (TAZ) reflects entitled projects and adheres to current general and specific plan maximum densities as conveyed by jurisdictions (except in cases where entitled projects and development agreements exceed these capacities as calculated by SCAG). Neighborhood level growth projections also feature strategies that help to reduce greenhouse gas emissions (GHG) from automobiles and light trucks to achieve Southern California's GHG reduction target, approved by the California Air Resources Board (CARB) in accordance

with state planning law. Connect SoCal's Forecasted Development Pattern is utilized for long range modeling purposes and does not supersede actions taken by elected bodies on future development, including entitlements and development agreements. SCAG does not have the authority to implement the plan -- neither through decisions about what type of development is built where, nor what transportation projects are ultimately built, as Connect SoCal is adopted at the jurisdictional level. Achieving a sustained regional outcome depends upon informed and intentional local action. To access jurisdictional level growth estimates and forecasts for years 2016 and 2045, please refer to the Connect SoCal Demographics and Growth Forecast Technical Report. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts				**Adopted City of Lawndale Forecasts**			
	Year 2020	**Year 2030**	**Year 2035**	**Year 2045**	**Year 2020**	**Year 2030**	**Year 2035**	**Year 2045**
Population	19,517,731	20,821,171	21,443,006	22,503,899	33,593	33,896	34,066	34,410
Households	6,333,458	6,902,821	7,170,110	7,633,451	9,833	9,987	10,059	10,202
Employment	8,695,427	9,303,627	9,566,384	10,048,822	7,512	7,782	7,918	8,311

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for Connect SoCal for guidance, as appropriate. SCAG's Regional Council certified the PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on May 7, 2020 and also adopted a PEIR Addendum and amended the MMRP on September 3, 2020 (please see the PEIR webpage and scroll to the bottom of the page for the PEIR Addendum). The PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

ENVIRONMENTAL JUSTICE

Per Senate Bill 1000 (SB 1000), local jurisdictions in California with disadvantaged communities are required to develop an Environmental Justice (EJ) Element or consider EJ goals, policies, and objectives in their General Plans when updating two or more General Plan Elements. SCAG staff recommends that you review the Environmental Justice Technical Report and the updated Environmental Justice Toolbox, which is a resource document to assist local jurisdictions in developing EJ-related goals and policies regarding solutions for EJ-related community issues.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL: January 5, 2023
jchavez@lawndalecity.org
Jared Chavez, Community Development Manager
City of Lawndale
Community Development
14717 Burin Avenue
Lawndale, California 90260

Notice of Preparation of an Environmental Impact Report for the City of Lawndale General Plan Update

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Environmental Impact Report (EIR). Please send a copy of the EIR upon its completion and public release directly to South Coast AQMD as copies of the EIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

CEQA Air Quality Analysis

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website[1] as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod[2] land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds[3] and localized significance thresholds (LSTs)[4] to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of

[1] South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook.
[2] CalEEMod is available free of charge at: www.caleemod.com.
[3] South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.
[4] South Coast AQMD's guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment[5].

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants and include schools, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. The Proposed Project will include, among others, many high, medium, and low density residential areas and is located in close proximity to I-405 freeway, and to facilitate the purpose of an EIR as an informational document, it is recommended that the Lead Agency perform a mobile source health risk assessment[5] to disclose the potential health risks[6].

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the EIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective*[7] is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process with additional guidance on strategies to reduce air pollution exposure near high-volume roadways available in CARB's technical advisory[8].

The South Coast AQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*[9] includes suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. It is recommended that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions.

South Coast AQMD staff is concerned about potential public health impacts of siting industrial use area (including warehouses and distribution center) within close proximity of sensitive land uses, especially in communities that are already heavily affected by the existing warehouse and truck activities. The South Coast AQMD's Multiple Air Toxics Exposure Study (MATES V), completed in August 2021, concluded

---

[5] South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.
[6] *Ibid*.
[7] CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* can be found at: http://www.arb.ca.gov/ch/handbook.pdf.
[8] CARB's technical advisory can be found at: https://www.arb.ca.gov/ch/landuse.htm.
[9] South Coast AQMD. 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. Available at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

that the largest contributor to cancer risk from air pollution is diesel particulate matter (DPM) emissions[10]. According to the MATES V Carcinogenic Risk interactive Map, the area surrounding the Proposed Project has an estimated cancer risk over 450 in one million[11]. Operation of warehouses generates and attracts heavy-duty diesel-fueled trucks that emit DPM. When the health impacts from the Proposed Project are added to those existing impacts, residents living in the communities surrounding the Proposed Project will possibly face an even greater exposure to air pollution and bear a disproportionate burden of increasing health risks.

Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook,[12] South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2022 Air Quality Management Plan,[13] and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.[14].

Mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider in the Draft EIR may include the following:

- Require zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate the utilization and market penetration of ZE and NZE trucks such as the Advanced Clean Trucks Rule[15] and the Heavy-Duty Low NOx Omnibus Regulation[16], ZE and NZE trucks will become increasingly more available to use. The Lead Agency should require a phase-in schedule to incentive the use of these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs with the Lead Agency. At a minimum, require the use of 2010 model year[17] that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include environmental

[10] South Coast AQMD. August 2021. *Multiple Air Toxics Exposure Study in the South Coast Air Basin V*. Available at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v.
[11] South Coast AQMD. MATES V Data Visualization Tool. Accessed at: MATES Data Visualization (arcgis.com).
[12] https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook
[13] South Coast AQMD's 2022 Air Quality Management Plan can be found at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan (Chapter 4 - Control Strategy and Implementation).
[14] Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: https://www.connectsocal.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf.
[15] CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks.
[16] CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox.
[17] CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulation is available at: https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the CEQA document, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing this higher activity level.
- Provide electric vehicle (EV) charging stations or at a minimum, provide the electrical infrastructure and electrical panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

Mitigation measures for operational air quality impacts from other area sources that the Lead Agency should consider in the Draft EIR may include the following:

- Maximize use of solar energy by installing solar energy arrays.
- Use light colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices, and appliances.
- Use of water-based or low VOC cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.

Design considerations for the Proposed Project that the Lead Agency should consider to further reduce air quality and health risk impacts include the following:

- Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).
- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Design the Proposed Project such that any check-in point for trucks is inside the Proposed Project site to ensure that there are no trucks queuing outside.
- Design the Proposed Project to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site.

On May 7, 2021, South Coast AQMD's Governing Board adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and Rule 316 – Fees for Rule 2305. Rules 2305 and 316 are new rules that will reduce regional and local emissions of nitrogen oxides (NOx) and particulate matter (PM), including diesel PM. These emission reductions will reduce public health impacts for communities located near warehouses from mobile sources that are associated with warehouse activities. Also, the emission reductions will help the region attain federal and state ambient air quality standards. Rule 2305 applies to owners and operators of warehouses greater than or equal to 100,000 square feet. Under Rule 2305, operators are subject to an annual WAIRE Points Compliance Obligation that is calculated based on the annual number of truck trips to the warehouse. WAIRE Points can be earned by implementing actions in a prescribed menu in Rule 2305, implementing a site-specific custom plan, or paying a mitigation fee. Warehouse owners are only required to submit limited information reports, but they can opt in to earn Points on behalf of their tenants if they so choose because certain actions to reduce emissions may be better achieved at the warehouse development phase, for instance the installation of solar and charging infrastructure. Rule 316 is a companion fee rule for Rule

2305 to allow South Coast AQMD to recover costs associated with Rule 2305 compliance activities. If the Proposed Project consists of the development of warehouses, the Proposed Project's warehouse owners and operators will be required to comply with Rule 2305 once the warehouse is occupied. Therefore, South Coast AQMD staff recommends that the Lead Agency review South Coast AQMD Rule 2305 to determine the potential WAIRE Points Compliance Obligation for future operators and explore whether additional project requirements and CEQA mitigation measures can be identified and implemented at the Proposed Project that may help future warehouse operators meet their compliance obligation[18]. South Coast AQMD staff is available to answer questions concerning Rule 2305 implementation and compliance by phone or email at (909) 396-3140 or waire-program@aqmd.gov. For implementation guidance documents and compliance and reporting tools, please visit South Coast AQMD's WAIRE Program webpage[19].

Health Risk Reduction Strategies

Many strategies are available to reduce exposures, including, but are not limited to, building filtration systems with MERV 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. Enhanced filtration units are capable of reducing exposures. However, enhanced filtration systems have limitations. For example, in a study that South Coast AQMD conducted to investigate filters[20], a cost burden is expected to be within the range of $120 to $240 per year to replace each filter panel. The initial start-up cost could substantially increase if an HVAC system needs to be installed and if standalone filter units are required. Installation costs may vary and include costs for conducting site assessments and obtaining permits and approvals before filters can be installed. Other costs may include filter life monitoring, annual maintenance, and training for conducting maintenance and reporting. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy consumption that the Lead Agency should evaluate in the EIR. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the environmental analysis does not generally account for the times when the residents have their windows or doors open or are in common space areas of the project. These filters have no ability to filter out any toxic gases. Furthermore, when used filters are replaced, replacement has the potential to result in emissions from the transportation of used filters at disposal sites and generate solid waste that the Lead Agency should evaluate in the EIR. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to diesel particulate matter emissions.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at swang1@aqmd.gov.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

---

[18] South Coast AQMD Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program. Accessed at: http://www.aqmd.gov/docs/default-source/rule-book/reg-xxiii/r2305.pdf.

[19] South Coast AQMD WAIRE Program. Accessed at: http://www.aqmd.gov/waire.

[20] This study evaluated filters rated MERV 13 or better. Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf. Also see 2012 Peer Review Journal article by South Coast AQMD: https://onlinelibrary.wiley.com/doi/10.1111/ina.12013.

SW
LAC221213-07
Control Number

From: Rick Hinojos
To: abrodkin@denovoplanning.com
Cc: Jared Chavez
Subject: Re: City of Lawndale General Plan Update: Notice of Preparation of an EIR
Date: Tuesday, December 6, 2022 11:19:26 AM

Thank you for the file, but the current general plan land use map was not included so that the proposed changes can be more objectively and immediately reviewed. Can a revised version that includes that map be distributed so that changes are more opaque to our neighbors?

On Tue, Dec 6, 2022, 11:12 <abrodkin@denovoplanning.com> wrote:

> The City of Lawndale will prepare an Environmental Impact Report (EIR) for the City of Lawndale General Plan Update (Project) to address the environmental impacts associated with the Project at a programmatic level. The proposed Project is a long-term plan consisting of policies that will guide future development activities and City actions. No specific development projects are proposed as part of this General Plan Update. However, the program EIR can serve to streamline environmental review of future projects.
>
> The City, as Lead Agency, requests that responsible and trustee agencies, all interested parties, and the Office of Planning and Research, respond in a manner consistent with § 15082(b) of the CEQA Guidelines. A **Notice of Preparation (NOP)** has been prepared and released to advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed Project. **The NOP public review period will begin on Tuesday, December 6, 2022 and end on Thursday, January 5, 2023.** Comments in response to this notice must be submitted to the address below, or by email by the close of the NOP review period, which is 5:00 PM on Thursday, January 5, 2023:
>
> Jared Chavez - Community Development Manager
> City of Lawndale
> 14717 Burin Ave.
> Lawndale, CA 90260
> Email: **jchavez@lawndalecity.org**
>
> Regards,
>
> **Ashley Brodkin** | Senior Planner
>
> De Novo Planning Group | www.denovoplanning.com
>
> abrodkin@denovoplanning.com | 714-440-0273
>
> **Southern California** | 180 East Main St #108 | Tustin, CA 92780

Northern California | 1020 Suncast Ln #106 | El Dorado Hills, CA 95762

Appendix B: Air Quality, Energy and Greenhouse Gas Emissions Modeling Data

Lawndale General Plan Update Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2023) - Unmitigated

3.3. Demolition (2024) - Unmitigated

3.5. Demolition (2025) - Unmitigated

3.7. Demolition (2026) - Unmitigated

3.9. Demolition (2027) - Unmitigated

3.11. Demolition (2028) - Unmitigated

3.13. Demolition (2029) - Unmitigated

3.15. Demolition (2030) - Unmitigated

3.17. Demolition (2031) - Unmitigated

3.19. Demolition (2032) - Unmitigated

3.21. Demolition (2033) - Unmitigated

3.23. Demolition (2034) - Unmitigated

3.25. Demolition (2035) - Unmitigated

3.27. Demolition (2036) - Unmitigated

3.29. Demolition (2037) - Unmitigated

3.31. Demolition (2038) - Unmitigated

3.33. Demolition (2039) - Unmitigated

3.35. Demolition (2040) - Unmitigated

3.37. Demolition (2041) - Unmitigated

3.39. Demolition (2042) - Unmitigated

3.41. Demolition (2043) - Unmitigated

3.43. Demolition (2044) - Unmitigated

3.45. Demolition (2045) - Unmitigated

3.47. Site Preparation (2023) - Unmitigated

3.49. Site Preparation (2024) - Unmitigated

3.51. Site Preparation (2025) - Unmitigated

3.53. Site Preparation (2026) - Unmitigated

3.55. Site Preparation (2027) - Unmitigated

3.57. Site Preparation (2028) - Unmitigated

3.59. Site Preparation (2029) - Unmitigated

3.61. Site Preparation (2030) - Unmitigated

3.63. Site Preparation (2031) - Unmitigated

3.65. Site Preparation (2032) - Unmitigated

3.67. Site Preparation (2033) - Unmitigated

3.69. Site Preparation (2034) - Unmitigated

3.71. Site Preparation (2035) - Unmitigated

3.73. Site Preparation (2036) - Unmitigated

3.75. Site Preparation (2037) - Unmitigated

3.77. Site Preparation (2038) - Unmitigated

3.79. Site Preparation (2039) - Unmitigated

3.81. Site Preparation (2040) - Unmitigated

3.83. Site Preparation (2041) - Unmitigated

3.85. Site Preparation (2042) - Unmitigated

3.87. Site Preparation (2043) - Unmitigated

3.89. Site Preparation (2044) - Unmitigated

3.91. Site Preparation (2045) - Unmitigated

3.93. Grading (2023) - Unmitigated

3.95. Grading (2024) - Unmitigated

3.97. Grading (2025) - Unmitigated

3.99. Grading (2026) - Unmitigated

3.101. Grading (2027) - Unmitigated

3.103. Grading (2028) - Unmitigated

3.105. Grading (2029) - Unmitigated

3.107. Grading (2030) - Unmitigated

3.109. Grading (2031) - Unmitigated

3.111. Grading (2032) - Unmitigated

3.113. Grading (2033) - Unmitigated

3.115. Grading (2034) - Unmitigated

3.117. Grading (2035) - Unmitigated

3.119. Grading (2036) - Unmitigated

3.121. Grading (2037) - Unmitigated

3.123. Grading (2038) - Unmitigated

3.125. Grading (2039) - Unmitigated

3.127. Grading (2040) - Unmitigated

3.129. Grading (2041) - Unmitigated

3.131. Grading (2042) - Unmitigated

3.133. Grading (2043) - Unmitigated

3.135. Grading (2044) - Unmitigated

3.137. Grading (2045) - Unmitigated

3.139. Building Construction (2023) - Unmitigated

3.141. Building Construction (2024) - Unmitigated

3.143. Building Construction (2025) - Unmitigated

3.145. Building Construction (2026) - Unmitigated

3.147. Building Construction (2027) - Unmitigated

3.149. Building Construction (2028) - Unmitigated

3.151. Building Construction (2029) - Unmitigated

3.153. Building Construction (2030) - Unmitigated

3.155. Building Construction (2031) - Unmitigated

3.157. Building Construction (2032) - Unmitigated

3.159. Building Construction (2033) - Unmitigated

3.161. Building Construction (2034) - Unmitigated

3.163. Building Construction (2035) - Unmitigated

3.165. Building Construction (2036) - Unmitigated

3.167. Building Construction (2037) - Unmitigated

3.169. Building Construction (2038) - Unmitigated

3.171. Building Construction (2039) - Unmitigated

3.173. Building Construction (2040) - Unmitigated

3.175. Building Construction (2041) - Unmitigated

3.177. Building Construction (2042) - Unmitigated

3.179. Building Construction (2043) - Unmitigated

3.181. Building Construction (2044) - Unmitigated

3.183. Building Construction (2045) - Unmitigated

3.185. Paving (2023) - Unmitigated

3.187. Paving (2024) - Unmitigated

3.189. Paving (2025) - Unmitigated

3.191. Paving (2026) - Unmitigated

3.193. Paving (2027) - Unmitigated

3.195. Paving (2028) - Unmitigated

3.197. Paving (2029) - Unmitigated

3.199. Paving (2030) - Unmitigated

3.201. Paving (2031) - Unmitigated

3.203. Paving (2032) - Unmitigated

3.205. Paving (2033) - Unmitigated

3.207. Paving (2034) - Unmitigated

3.209. Paving (2035) - Unmitigated

3.211. Paving (2036) - Unmitigated

3.213. Paving (2037) - Unmitigated

3.215. Paving (2038) - Unmitigated

3.217. Paving (2039) - Unmitigated

3.219. Paving (2040) - Unmitigated

3.221. Paving (2041) - Unmitigated

3.223. Paving (2042) - Unmitigated

3.225. Paving (2043) - Unmitigated

3.227. Paving (2044) - Unmitigated

3.229. Paving (2045) - Unmitigated

3.231. Architectural Coating (2023) - Unmitigated

3.233. Architectural Coating (2024) - Unmitigated

3.235. Architectural Coating (2025) - Unmitigated

3.237. Architectural Coating (2026) - Unmitigated

3.239. Architectural Coating (2027) - Unmitigated

3.241. Architectural Coating (2028) - Unmitigated

3.243. Architectural Coating (2029) - Unmitigated

3.245. Architectural Coating (2030) - Unmitigated

3.247. Architectural Coating (2031) - Unmitigated

3.249. Architectural Coating (2032) - Unmitigated

3.251. Architectural Coating (2033) - Unmitigated

3.253. Architectural Coating (2034) - Unmitigated

3.255. Architectural Coating (2035) - Unmitigated

3.257. Architectural Coating (2036) - Unmitigated

3.259. Architectural Coating (2037) - Unmitigated

3.261. Architectural Coating (2038) - Unmitigated

3.263. Architectural Coating (2039) - Unmitigated

3.265. Architectural Coating (2040) - Unmitigated

3.267. Architectural Coating (2041) - Unmitigated

3.269. Architectural Coating (2042) - Unmitigated

3.271. Architectural Coating (2043) - Unmitigated

3.273. Architectural Coating (2044) - Unmitigated

3.275. Architectural Coating (2045) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lawndale General Plan Update
Construction Start Date	10/1/2023
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	33.88757771544401, -118.3536468469073
County	Los Angeles-South Coast
City	Lawndale
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4562
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Single Family Housing	14,832	Dwelling Unit	824	28,922,400	173,725,095	0.00	43,903	Assume Single-family for residential (for simplicity). Also assumes average density (18 units per acre)
Strip Mall	2,439	1000sqft	56.0	2,439,360	0.00	0.00	—	Assumes retail "strip mall" land use type (for simplicity)
General Light Industry	50.0	1000sqft	21.0	50,000	0.00	0.00	—	Assumes industrial "general light industry" land use type (for simplicity)
City Park	13.0	Acre	13.0	0.00	0.00	0.00	—	Assumes recreational "City Park" land use type (for simplicity)
Library	6,011	1000sqft	138	6,011,280	0.00	0.00	—	Assumes educational "Library" land use type (for simplicity)
General Office Building	4,138	1000sqft	95.0	4,138,200	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	83.6	121	312	1,087	1.00	6.67	189	196	6.27	45.6	51.9	—	307,562	307,562	12.6	22.1	991	315,467
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	91.6	125	351	1,025	1.00	7.25	189	196	6.80	45.6	52.4	—	304,008	304,008	13.2	22.4	27.4	311,042
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.3	85.9	236	707	0.72	4.78	134	139	4.49	32.3	36.8	—	215,650	215,650	9.25	16.0	306	220,970
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	15.7	43.0	129	0.13	0.87	24.4	25.3	0.82	5.89	6.71	—	35,703	35,703	1.53	2.66	50.7	36,584

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	83.6	121	312	1,087	1.00	6.67	189	196	6.27	45.6	51.9	—	307,562	307,562	12.6	22.1	991	315,467
2025	79.0	117	286	1,006	1.00	5.97	189	195	4.80	45.6	50.4	—	302,074	302,074	12.6	22.1	928	309,916
2026	70.8	110	267	939	1.00	5.57	189	194	4.44	45.6	50.0	—	296,718	296,718	12.3	22.1	861	304,485
2027	67.9	108	253	880	1.00	4.49	189	193	4.19	45.6	49.8	—	291,385	291,385	12.3	21.3	791	298,836
2028	66.0	105	244	834	1.00	4.30	189	193	4.02	45.6	49.6	—	285,913	285,913	6.30	21.2	725	293,124
2029	64.1	103	228	786	1.00	4.09	189	193	3.83	45.6	49.4	—	280,336	280,336	6.22	21.2	661	287,482
2030	56.4	101	216	746	1.00	3.98	189	193	3.73	45.6	49.3	—	274,707	274,707	6.22	20.4	603	281,549
2031	54.3	94.2	208	704	1.00	3.89	189	193	3.64	45.6	49.2	—	269,019	269,019	5.87	15.5	549	274,333
2032	52.1	92.5	194	665	1.00	3.59	189	192	3.36	45.6	48.9	—	263,615	263,615	5.87	14.7	499	268,634
2033	50.7	91.2	187	632	1.00	3.38	189	192	3.18	45.6	48.8	—	258,382	258,382	5.87	14.7	454	263,356
2034	43.4	89.7	176	602	1.00	3.23	189	192	3.04	45.6	48.6	—	253,461	253,461	5.05	13.9	413	258,129

2035	42.3	88.6	170	576	1.00	3.01	189	192	2.83	45.6	48.4	—	248,882	248,882	4.70	13.9	275	253,403
2036	41.3	87.7	163	551	1.00	2.82	189	192	2.66	45.6	48.2	—	244,775	244,775	4.70	13.0	236	249,012
2037	40.2	86.5	161	533	1.00	2.79	189	192	2.64	45.6	48.2	—	241,022	241,022	4.70	13.0	201	245,224
2038	38.9	85.4	155	516	1.00	2.63	189	191	2.48	45.6	48.1	—	237,854	237,854	4.62	12.2	171	241,779
2039	38.0	84.8	146	503	1.00	2.55	189	191	2.41	45.6	48.0	—	234,868	234,868	4.62	12.2	144	238,766
2040	36.8	83.6	145	491	1.00	2.52	189	191	2.38	45.6	48.0	—	232,207	232,207	4.36	12.2	121	236,075
2041	34.9	77.7	139	478	1.00	2.34	189	191	2.22	45.6	47.8	—	229,853	229,853	4.28	11.9	102	233,621
2042	34.2	77.1	137	465	1.00	2.29	189	191	2.17	45.6	47.8	—	227,772	227,772	4.28	11.1	86.2	231,279
2043	33.6	76.6	136	459	1.00	2.26	189	191	2.14	45.6	47.7	—	225,944	225,944	4.28	11.1	72.9	229,438
2044	33.4	76.3	133	451	1.00	2.12	189	191	2.02	45.6	47.6	—	224,357	224,357	4.28	11.1	61.8	227,840
2045	32.7	75.4	131	450	1.00	2.09	189	191	1.99	45.6	47.6	—	222,970	222,970	3.37	11.1	52.3	226,421
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	91.6	125	351	1,025	1.00	7.25	189	196	6.80	45.6	52.4	—	304,008	304,008	13.2	22.4	27.4	311,042
2024	83.0	120	328	947	1.00	6.67	189	196	6.27	45.6	51.9	—	298,717	298,717	12.9	22.4	25.7	305,743
2025	78.4	117	298	879	1.00	5.97	189	195	4.80	45.6	50.4	—	293,437	293,437	12.9	22.4	24.1	300,461
2026	70.6	109	279	826	1.00	5.57	189	194	4.44	45.6	50.0	—	288,284	288,284	12.6	22.1	22.3	295,219
2027	67.2	107	268	770	1.00	4.49	189	193	4.19	45.6	49.8	—	283,124	283,124	7.65	21.3	20.5	289,689
2028	65.6	105	254	732	1.00	4.30	189	193	4.02	45.6	49.6	—	277,816	277,816	6.56	21.3	18.8	284,352
2029	58.4	102	239	689	1.00	4.09	189	193	3.83	45.6	49.4	—	272,397	272,397	6.48	21.3	17.2	278,929
2030	55.7	101	226	653	1.00	3.98	189	193	3.73	45.6	49.3	—	266,911	266,911	6.22	20.4	15.6	273,166
2031	53.5	93.8	218	620	1.00	3.89	189	193	3.64	45.6	49.2	—	261,361	261,361	6.14	20.4	14.2	267,613
2032	51.7	92.1	204	585	1.00	3.59	189	192	3.36	45.6	48.9	—	256,070	256,070	6.14	14.7	12.9	260,610
2033	50.0	90.5	192	557	1.00	3.38	189	192	3.18	45.6	48.8	—	250,950	250,950	5.87	14.7	11.8	255,483
2034	43.0	89.2	186	531	1.00	3.23	189	192	3.04	45.6	48.6	—	246,124	246,124	5.05	13.9	10.7	250,389
2035	41.8	88.1	179	509	1.00	3.01	189	192	2.83	45.6	48.4	—	241,629	241,629	4.97	13.9	7.12	245,889
2036	41.2	87.6	168	488	1.00	2.82	189	192	2.66	45.6	48.2	—	237,595	237,595	4.97	13.0	6.10	241,609

2037	40.0	86.7	165	470	1.00	2.79	189	192	2.64	45.6	48.2	—	233,906	233,906	4.70	13.0	5.20	237,912
2038	38.9	85.5	159	453	1.00	2.63	189	191	2.48	45.6	48.1	—	230,783	230,783	4.62	12.2	4.42	234,541
2039	37.8	84.6	155	439	1.00	2.55	189	191	2.41	45.6	48.0	—	227,847	227,847	4.62	12.2	3.73	231,604
2040	36.3	83.2	153	432	1.00	2.52	189	191	2.38	45.6	48.0	—	225,235	225,235	4.62	12.2	3.13	228,992
2041	34.9	77.5	144	423	1.00	2.34	189	191	2.22	45.6	47.8	—	222,921	222,921	4.54	12.2	2.64	226,675
2042	34.0	76.6	142	410	1.00	2.29	189	191	2.17	45.6	47.8	—	220,875	220,875	4.54	11.4	2.24	224,384
2043	33.7	76.7	140	404	1.00	2.26	189	191	2.14	45.6	47.7	—	219,081	219,081	4.54	11.4	1.89	222,590
2044	33.2	75.9	137	400	1.00	2.12	189	191	2.02	45.6	47.6	—	217,520	217,520	4.19	11.4	1.60	221,020
2045	32.2	75.3	136	395	1.00	2.09	189	191	1.99	45.6	47.6	—	216,159	216,159	3.37	11.4	1.35	219,638
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	16.5	22.4	63.3	192	0.18	1.30	33.6	34.9	1.22	8.11	9.34	—	55,172	55,172	2.37	4.03	82.3	56,515
2024	59.3	85.9	236	707	0.72	4.78	134	139	4.49	32.3	36.8	—	215,650	215,650	9.25	16.0	306	220,970
2025	55.8	83.3	217	653	0.72	4.26	133	138	3.43	32.2	35.6	—	211,249	211,249	9.23	15.8	287	216,479
2026	50.3	77.9	203	612	0.72	3.98	133	137	3.17	32.2	35.4	—	207,525	207,525	8.98	15.8	266	212,728
2027	48.1	76.3	192	572	0.72	3.20	133	137	3.00	32.2	35.2	—	203,807	203,807	5.47	15.2	244	208,725
2028	46.9	74.8	182	543	0.72	3.08	134	137	2.88	32.3	35.1	—	200,534	200,534	4.70	15.3	224	205,426
2029	41.6	73.0	171	511	0.72	2.92	133	136	2.73	32.2	34.9	—	196,083	196,083	4.63	15.2	204	200,924
2030	39.7	71.7	161	485	0.72	2.84	133	136	2.66	32.2	34.8	—	192,136	192,136	4.44	14.6	186	196,778
2031	38.5	67.1	156	458	0.72	2.78	133	136	2.60	32.2	34.8	—	188,146	188,146	4.38	14.6	169	192,771
2032	37.1	65.8	146	435	0.72	2.57	134	136	2.41	32.3	34.7	—	184,847	184,847	4.40	14.0	154	189,293
2033	35.8	64.7	140	413	0.72	2.42	133	136	2.27	32.2	34.5	—	180,663	180,663	4.19	10.5	140	184,032
2034	30.6	63.6	133	391	0.72	2.31	133	136	2.17	32.2	34.4	—	177,198	177,198	3.61	9.90	128	180,364
2035	30.0	63.0	128	376	0.72	2.15	133	136	2.02	32.2	34.2	—	173,972	173,972	3.55	9.90	84.6	177,095
2036	29.4	62.6	120	362	0.72	2.02	134	136	1.91	32.3	34.2	—	171,542	171,542	3.56	9.33	72.9	174,485
2037	28.6	61.7	118	348	0.72	2.00	133	135	1.88	32.2	34.1	—	168,427	168,427	3.36	9.31	61.9	171,347
2038	27.8	61.0	113	336	0.72	1.88	133	135	1.77	32.2	34.0	—	166,189	166,189	3.30	8.72	52.6	168,923
2039	27.1	60.3	111	326	0.72	1.82	133	135	1.72	32.2	33.9	—	164,078	164,078	3.30	8.72	44.3	166,803

2040	26.1	59.7	110	322	0.72	1.80	134	136	1.70	32.3	34.0	—	162,649	162,649	3.31	8.74	37.4	165,375
2041	24.7	55.3	102	311	0.72	1.67	133	135	1.59	32.2	33.8	—	160,544	160,544	3.24	8.72	31.4	163,256
2042	24.2	54.9	101	306	0.72	1.63	133	135	1.55	32.2	33.7	—	159,076	159,076	3.24	8.13	26.6	161,607
2043	24.2	54.8	100	301	0.72	1.61	133	135	1.53	32.2	33.7	—	157,787	157,787	3.05	8.13	22.5	160,310
2044	23.7	54.4	97.9	296	0.72	1.52	134	135	1.44	32.3	33.7	—	157,098	157,098	3.06	8.16	19.1	159,624
2045	23.1	53.8	96.5	295	0.72	1.50	133	135	1.42	32.2	33.6	—	155,692	155,692	2.41	8.13	16.1	158,192
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	3.00	4.08	11.6	35.0	0.03	0.24	6.14	6.37	0.22	1.48	1.70	—	9,134	9,134	0.39	0.67	13.6	9,357
2024	10.8	15.7	43.0	129	0.13	0.87	24.4	25.3	0.82	5.89	6.71	—	35,703	35,703	1.53	2.66	50.7	36,584
2025	10.2	15.2	39.5	119	0.13	0.78	24.3	25.1	0.63	5.87	6.50	—	34,975	34,975	1.53	2.62	47.5	35,841
2026	9.18	14.2	37.0	112	0.13	0.73	24.3	25.1	0.58	5.87	6.45	—	34,358	34,358	1.49	2.62	44.0	35,220
2027	8.78	13.9	35.0	104	0.13	0.58	24.3	24.9	0.55	5.87	6.42	—	33,743	33,743	0.90	2.52	40.3	34,557
2028	8.55	13.7	33.3	99.1	0.13	0.56	24.4	25.0	0.53	5.89	6.41	—	33,201	33,201	0.78	2.53	37.1	34,011
2029	7.59	13.3	31.2	93.3	0.13	0.53	24.3	24.9	0.50	5.87	6.37	—	32,464	32,464	0.77	2.51	33.8	33,265
2030	7.24	13.1	29.5	88.6	0.13	0.52	24.3	24.9	0.49	5.87	6.36	—	31,810	31,810	0.74	2.41	30.7	32,579
2031	7.03	12.2	28.4	83.7	0.13	0.51	24.3	24.9	0.47	5.87	6.35	—	31,150	31,150	0.73	2.41	28.0	31,915
2032	6.76	12.0	26.6	79.3	0.13	0.47	24.4	24.9	0.44	5.89	6.33	—	30,604	30,604	0.73	2.32	25.5	31,340
2033	6.53	11.8	25.6	75.4	0.13	0.44	24.3	24.8	0.41	5.87	6.29	—	29,911	29,911	0.69	1.74	23.2	30,469
2034	5.58	11.6	24.2	71.4	0.13	0.42	24.3	24.8	0.40	5.87	6.27	—	29,337	29,337	0.60	1.64	21.2	29,861
2035	5.47	11.5	23.3	68.6	0.13	0.39	24.3	24.7	0.37	5.87	6.24	—	28,803	28,803	0.59	1.64	14.0	29,320
2036	5.37	11.4	21.9	66.0	0.13	0.37	24.4	24.8	0.35	5.89	6.24	—	28,401	28,401	0.59	1.55	12.1	28,888
2037	5.22	11.3	21.5	63.5	0.13	0.36	24.3	24.7	0.34	5.87	6.22	—	27,885	27,885	0.56	1.54	10.2	28,368
2038	5.08	11.1	20.6	61.3	0.13	0.34	24.3	24.7	0.32	5.87	6.20	—	27,515	27,515	0.55	1.44	8.70	27,967
2039	4.94	11.0	20.3	59.5	0.13	0.33	24.3	24.7	0.31	5.87	6.19	—	27,165	27,165	0.55	1.44	7.34	27,616
2040	4.77	10.9	20.0	58.8	0.13	0.33	24.4	24.7	0.31	5.89	6.20	—	26,928	26,928	0.55	1.45	6.20	27,380
2041	4.51	10.1	18.7	56.8	0.13	0.31	24.3	24.7	0.29	5.87	6.16	—	26,580	26,580	0.54	1.44	5.21	27,029
2042	4.41	10.0	18.4	55.8	0.13	0.30	24.3	24.6	0.28	5.87	6.16	—	26,337	26,337	0.54	1.35	4.40	26,756

2043	4.41	10.0	18.3	55.0	0.13	0.29	24.3	24.6	0.28	5.87	6.15	—	26,123	26,123	0.51	1.35	3.72	26,541
2044	4.32	9.93	17.9	54.0	0.13	0.28	24.4	24.7	0.26	5.89	6.15	—	26,009	26,009	0.51	1.35	3.16	26,428
2045	4.22	9.82	17.6	53.8	0.13	0.27	24.3	24.6	0.26	5.87	6.13	—	25,777	25,777	0.40	1.35	2.67	26,191

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	545	1,466	437	3,957	8.16	23.0	728	751	23.1	185	208	15,947	1,180,832	1,196,779	1,680	37.2	442	1,250,297
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	370	1,302	441	2,396	7.82	21.9	728	750	21.8	185	207	15,947	1,148,998	1,164,945	1,681	38.3	273	1,218,664
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	486	1,411	450	3,402	7.94	22.6	728	751	22.7	185	208	15,947	1,159,427	1,175,374	1,681	38.4	343	1,229,176
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	88.8	257	82.1	621	1.45	4.13	133	137	4.14	33.8	37.9	2,640	191,956	194,596	278	6.35	56.9	203,504

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	342	317	179	2,415	6.56	2.59	728	731	2.42	185	187	—	668,830	668,830	25.1	25.6	173	677,270
Area	175	1,135	12.4	1,395	0.07	1.02	—	1.02	1.35	—	1.35	0.00	4,510	4,510	0.19	0.04	—	4,526
Energy	28.0	14.0	245	147	1.53	19.3	—	19.3	19.3	—	19.3	—	488,085	488,085	50.2	3.40	—	490,354
Water	—	—	—	—	—	—	—	—	—	—	—	3,198	19,407	22,605	330	8.09	—	33,273
Waste	—	—	—	—	—	—	—	—	—	—	—	12,749	0.00	12,749	1,274	0.00	—	44,605
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	269	269
Total	545	1,466	437	3,957	8.16	23.0	728	751	23.1	185	208	15,947	1,180,832	1,196,779	1,680	37.2	442	1,250,297
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	342	317	196	2,249	6.29	2.59	728	731	2.42	185	187	—	641,506	641,506	26.1	26.8	4.49	650,164
Area	0.00	971	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	28.0	14.0	245	147	1.53	19.3	—	19.3	19.3	—	19.3	—	488,085	488,085	50.2	3.40	—	490,354
Water	—	—	—	—	—	—	—	—	—	—	—	3,198	19,407	22,605	330	8.09	—	33,273
Waste	—	—	—	—	—	—	—	—	—	—	—	12,749	0.00	12,749	1,274	0.00	—	44,605
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	269	269
Total	370	1,302	441	2,396	7.82	21.9	728	750	21.8	185	207	15,947	1,148,998	1,164,945	1,681	38.3	273	1,218,664
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	339	314	196	2,300	6.37	2.59	728	731	2.42	185	187	—	648,845	648,845	25.9	26.9	74.8	657,575
Area	120	1,083	8.49	956	0.05	0.70	—	0.70	0.93	—	0.93	0.00	3,089	3,089	0.13	0.03	—	3,100
Energy	28.0	14.0	245	147	1.53	19.3	—	19.3	19.3	—	19.3	—	488,085	488,085	50.2	3.40	—	490,354
Water	—	—	—	—	—	—	—	—	—	—	—	3,198	19,407	22,605	330	8.09	—	33,273
Waste	—	—	—	—	—	—	—	—	—	—	—	12,749	0.00	12,749	1,274	0.00	—	44,605
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	269	269

Total	486	1,411	450	3,402	7.94	22.6	728	751	22.7	185	208	15,947	1,159,42	1,175,37	1,681	38.4	343	1,229,17
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	61.8	57.2	35.8	420	1.16	0.47	133	133	0.44	33.8	34.2	—	107,424	107,424	4.29	4.45	12.4	108,869
Area	21.9	198	1.55	174	0.01	0.13	—	0.13	0.17	—	0.17	0.00	511	511	0.02	< 0.005	—	513
Energy	5.11	2.55	44.8	26.8	0.28	3.53	—	3.53	3.53	—	3.53	—	80,808	80,808	8.31	0.56	—	81,184
Water	—	—	—	—	—	—	—	—	—	—	—	529	3,213	3,742	54.7	1.34	—	5,509
Waste	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	211	0.00	—	7,385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44.5	44.5
Total	88.8	257	82.1	621	1.45	4.13	133	137	4.14	33.8	37.9	2,640	191,956	194,596	278	6.35	56.9	203,504

3. Construction Emissions Details

3.1. Demolition (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.39	2.84	27.3	23.5	0.03	1.20	—	1.20	1.10	—	1.10	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.92	4.23	0.01	0.22	—	0.22	0.20	—	0.20	—	617	617	0.03	0.01	—	619

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.90	0.77	< 0.005	0.04	—	0.04	0.04	—	0.04	—	102	102	< 0.005	< 0.005	—	102
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.04	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.02	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.20	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	37.5	37.5	< 0.005	< 0.005	0.07	38.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.21	6.21	< 0.005	< 0.005	0.01	6.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.12	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	17.8	15.6	0.02	0.76	—	0.76	0.70	—	0.70	—	2,453	2,453	0.10	0.02	—	2,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.25	2.84	< 0.005	0.14	—	0.14	0.13	—	0.13	—	406	406	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	1.13	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	212	212	0.01	0.01	0.84	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.08	0.96	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	0.01	0.01	0.02	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	146	146	0.01	0.01	0.26	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.2	24.2	< 0.005	< 0.005	0.04	24.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.04	1.71	15.9	14.2	0.02	0.66	—	0.66	0.60	—	0.60	—	2,446	2,446	0.10	0.02	—	2,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.89	2.60	< 0.005	0.12	—	0.12	0.11	—	0.11	—	405	405	0.02	< 0.005	—	406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.04	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	207	207	0.01	0.01	0.76	210
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.02	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	0.01	0.01	0.23	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.95	1.63	14.8	13.6	0.02	0.60	—	0.60	0.55	—	0.55	—	2,448	2,448	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.36	0.30	2.69	2.48	< 0.005	0.11	—	0.11	0.10	—	0.10	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	0.01	0.01	0.69	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	0.01	0.01	0.21	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.64	2.21	19.9	18.6	0.03	0.80	—	0.80	0.73	—	0.73	—	3,427	3,427	0.14	0.03	—	3,439
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89	1.58	14.2	13.3	0.02	0.57	—	0.57	0.52	—	0.52	—	2,448	2,448	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.59	2.43	< 0.005	0.10	—	0.10	0.10	—	0.10	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	0.01	0.01	0.62	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	191
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	< 0.005	0.01	0.19	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.7	22.7	< 0.005	< 0.005	0.03	23.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Demolition (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.61	2.19	19.6	18.7	0.03	0.78	—	0.78	0.71	—	0.71	—	3,429	3,429	0.14	0.03	—	3,440
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.61	2.19	19.6	18.7	0.03	0.78	—	0.78	0.71	—	0.71	—	3,429	3,429	0.14	0.03	—	3,440
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	1.57	14.0	13.4	0.02	0.56	—	0.56	0.51	—	0.51	—	2,456	2,456	0.10	0.02	—	2,464
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.56	2.44	< 0.005	0.10	—	0.10	0.09	—	0.09	—	407	407	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	196	196	< 0.005	0.01	0.56	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.72	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.01	188
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.17	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.3	22.3	< 0.005	< 0.005	0.03	22.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Demolition (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.82	1.53	13.3	13.2	0.02	0.53	—	0.53	0.48	—	0.48	—	2,448	2,448	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.42	2.41	< 0.005	0.10	—	0.10	0.09	—	0.09	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	192	192	< 0.005	0.01	0.50	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.67	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	182	182	< 0.005	0.01	0.01	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.50	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	132	132	< 0.005	0.01	0.15	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.9	21.9	< 0.005	< 0.005	0.03	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Demolition (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.48	2.09	18.1	18.7	0.03	0.72	—	0.72	0.66	—	0.66	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.48	2.09	18.1	18.7	0.03	0.72	—	0.72	0.66	—	0.66	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	1.49	12.9	13.3	0.02	0.51	—	0.51	0.47	—	0.47	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.36	2.43	< 0.005	0.09	—	0.09	0.09	—	0.09	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.74	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.44	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.63	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	180	180	< 0.005	0.01	0.01	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	130	130	< 0.005	0.01	0.14	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.5	21.5	< 0.005	< 0.005	0.02	21.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Demolition (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.04	17.5	18.3	0.03	0.70	—	0.70	0.64	—	0.64	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.43	2.04	17.5	18.3	0.03	0.70	—	0.70	0.64	—	0.64	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.73	1.46	12.5	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.29	2.39	< 0.005	0.09	—	0.09	0.08	—	0.08	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.70	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	< 0.005	0.39	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.59	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	177	177	< 0.005	0.01	0.01	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	0.01	0.12	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Demolition (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	16.2	16.9	0.03	0.62	—	0.62	0.57	—	0.57	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	16.2	16.9	0.03	0.62	—	0.62	0.57	—	0.57	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.37	11.6	12.1	0.02	0.44	—	0.44	0.41	—	0.41	—	2,454	2,454	0.10	0.02	—	2,463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	0.25	2.12	2.20	< 0.005	0.08	—	0.08	0.07	—	0.07	—	406	406	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.65	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	184	184	< 0.005	< 0.005	0.35	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	174	174	< 0.005	< 0.005	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	127	127	< 0.005	0.01	0.11	128
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Demolition (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.22	1.86	15.5	15.9	0.03	0.57	—	0.57	0.53	—	0.53	—	3,427	3,427	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.22	1.86	15.5	15.9	0.03	0.57	—	0.57	0.53	—	0.53	—	3,427	3,427	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.58	1.33	11.1	11.4	0.02	0.41	—	0.41	0.38	—	0.38	—	2,448	2,448	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.02	2.08	< 0.005	0.07	—	0.07	0.07	—	0.07	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.62	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	181	181	< 0.005	< 0.005	0.31	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.52	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	< 0.005	0.01	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.09	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.7	20.7	< 0.005	< 0.005	0.02	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Demolition (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.82	15.1	15.7	0.03	0.54	—	0.54	0.50	—	0.50	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.17	1.82	15.1	15.7	0.03	0.54	—	0.54	0.50	—	0.50	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.30	10.8	11.2	0.02	0.39	—	0.39	0.35	—	0.35	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	1.97	2.05	< 0.005	0.07	—	0.07	0.06	—	0.06	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.58	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	< 0.005	0.27	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.49	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.01	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.37	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	123	123	< 0.005	< 0.005	0.08	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.4	20.4	< 0.005	< 0.005	0.01	20.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Demolition (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.08	1.75	14.2	14.9	0.03	0.49	—	0.49	0.45	—	0.45	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.08	1.75	14.2	14.9	0.03	0.49	—	0.49	0.45	—	0.45	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.25	10.1	10.7	0.02	0.35	—	0.35	0.32	—	0.32	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.27	0.23	1.85	1.95	< 0.005	0.06	—	0.06	0.06	—	0.06	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.56	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	177	177	< 0.005	< 0.005	0.23	178
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.01	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.35	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.07	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.2	20.2	< 0.005	< 0.005	0.01	20.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Demolition (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	13.4	14.1	0.03	0.44	—	0.44	0.41	—	0.41	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	13.4	14.1	0.03	0.44	—	0.44	0.41	—	0.41	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	1.20	9.59	10.1	0.02	0.32	—	0.32	0.29	—	0.29	—	2,454	2,454	0.10	0.02	—	2,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	1.85	< 0.005	0.06	—	0.06	0.05	—	0.05	—	406	406	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.53	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	176	176	< 0.005	< 0.005	0.20	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	167	167	< 0.005	< 0.005	0.01	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.06	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.01	20.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Demolition (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.67	13.4	14.3	0.03	0.45	—	0.45	0.41	—	0.41	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.99	1.67	13.4	14.3	0.03	0.45	—	0.45	0.41	—	0.41	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	1.20	9.57	10.2	0.02	0.32	—	0.32	0.29	—	0.29	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	1.86	< 0.005	0.06	—	0.06	0.05	—	0.05	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.51	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	174	174	< 0.005	< 0.005	0.17	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	165	165	< 0.005	< 0.005	< 0.005	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.05	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.9	19.9	< 0.005	< 0.005	0.01	19.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Demolition (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	12.4	13.2	0.03	0.40	—	0.40	0.37	—	0.37	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	12.4	13.2	0.03	0.40	—	0.40	0.37	—	0.37	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.14	8.83	9.43	0.02	0.29	—	0.29	0.26	—	0.26	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.25	0.21	1.61	1.72	< 0.005	0.05	—	0.05	0.05	—	0.05	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.49	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	< 0.005	0.15	174
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.41	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	164	164	< 0.005	< 0.005	< 0.005	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.31	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.05	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.7	19.7	< 0.005	< 0.005	0.01	19.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Demolition (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	1.57	12.1	13.0	0.03	0.39	—	0.39	0.35	—	0.35	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	1.57	12.1	13.0	0.03	0.39	—	0.39	0.35	—	0.35	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.12	8.61	9.28	0.02	0.28	—	0.28	0.25	—	0.25	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.57	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.48	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	< 0.005	0.13	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	163	163	< 0.005	< 0.005	< 0.005	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.04	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.6	19.6	< 0.005	< 0.005	0.01	19.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Demolition (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.55	12.0	12.9	0.03	0.38	—	0.38	0.35	—	0.35	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.85	1.55	12.0	12.9	0.03	0.38	—	0.38	0.35	—	0.35	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.33	1.11	8.60	9.24	0.02	0.27	—	0.27	0.25	—	0.25	—	2,454	2,454	0.10	0.02	—	2,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.57	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	406	406	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.47	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	171	171	< 0.005	< 0.005	0.11	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.39	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	162	162	< 0.005	< 0.005	< 0.005	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.03	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.5	19.5	< 0.005	< 0.005	0.01	19.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Demolition (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.76	1.47	11.2	12.4	0.03	0.33	—	0.33	0.30	—	0.30	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.76	1.47	11.2	12.4	0.03	0.33	—	0.33	0.30	—	0.30	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.26	1.05	7.99	8.88	0.02	0.24	—	0.24	0.22	—	0.22	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.23	0.19	1.46	1.62	< 0.005	0.04	—	0.04	0.04	—	0.04	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.45	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.09	171
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.38	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	162	162	< 0.005	< 0.005	< 0.005	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.29	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.03	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.4	19.4	< 0.005	< 0.005	< 0.005	19.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Demolition (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	1.46	10.9	12.1	0.03	0.32	—	0.32	0.29	—	0.29	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	1.46	10.9	12.1	0.03	0.32	—	0.32	0.29	—	0.29	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	1.04	7.81	8.67	0.02	0.23	—	0.23	0.21	—	0.21	—	2,447	2,447	0.10	0.02	—	2,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.43	1.58	< 0.005	0.04	—	0.04	0.04	—	0.04	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.44	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.08	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.37	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	161	161	< 0.005	< 0.005	< 0.005	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.28	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.03	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.3	19.3	< 0.005	< 0.005	< 0.005	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Demolition (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.73	1.45	11.0	12.1	0.03	0.32	—	0.32	0.29	—	0.29	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.73	1.45	11.0	12.1	0.03	0.32	—	0.32	0.29	—	0.29	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	1.04	7.88	8.63	0.02	0.23	—	0.23	0.21	—	0.21	—	2,447	2,447	0.10	0.02	—	2,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.19	1.44	1.57	< 0.005	0.04	—	0.04	0.04	—	0.04	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	169	169	< 0.005	< 0.005	0.07	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	160	160	< 0.005	< 0.005	< 0.005	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.2	19.2	< 0.005	< 0.005	< 0.005	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Demolition (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.66	1.39	10.3	11.6	0.03	0.27	—	0.27	0.25	—	0.25	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.66	1.39	10.3	11.6	0.03	0.27	—	0.27	0.25	—	0.25	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	7.37	8.31	0.02	0.20	—	0.20	0.18	—	0.18	—	2,454	2,454	0.10	0.02	—	2,462
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.22	0.18	1.35	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	406	406	0.02	< 0.005	—	408
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.06	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	160	160	< 0.005	< 0.005	< 0.005	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.2	19.2	< 0.005	< 0.005	< 0.005	19.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Demolition (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.66	1.39	10.3	11.6	0.03	0.27	—	0.27	0.25	—	0.25	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.66	1.39	10.3	11.6	0.03	0.27	—	0.27	0.25	—	0.25	—	3,426	3,426	0.14	0.03	—	3,438
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	7.33	8.30	0.02	0.20	—	0.20	0.18	—	0.18	—	2,447	2,447	0.10	0.02	—	2,455
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.34	1.51	< 0.005	0.04	—	0.04	0.03	—	0.03	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.42	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.05	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.35	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	159	159	< 0.005	< 0.005	< 0.005	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.1	19.1	< 0.005	< 0.005	< 0.005	19.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	7.16	6.39	0.01	0.32	—	0.32	0.30	—	0.30	—	953	953	0.04	0.01	—	957
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.31	1.17	< 0.005	0.06	—	0.06	0.05	—	0.05	—	158	158	0.01	< 0.005	—	158
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.11	1.21	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	239	239	0.01	0.01	0.03	242
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.7	43.7	< 0.005	< 0.005	0.08	44.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.24	7.24	< 0.005	< 0.005	0.01	7.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.11	2.61	25.8	23.6	0.04	1.15	—	1.15	1.05	—	1.05	—	3,793	3,793	0.15	0.03	—	3,806
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.70	4.30	0.01	0.21	—	0.21	0.19	—	0.19	—	628	628	0.03	0.01	—	630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.32	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	247	247	0.01	0.01	0.97	251
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.12	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	234	234	0.01	0.01	0.03	237
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.84	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	170	170	0.01	0.01	0.30	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.2	28.2	< 0.005	< 0.005	0.05	28.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.81	2.36	22.6	21.6	0.03	0.98	—	0.98	0.90	—	0.90	—	3,782	3,782	0.15	0.03	—	3,795
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	4.12	3.93	0.01	0.18	—	0.18	0.16	—	0.16	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.22	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	242	242	0.01	0.01	0.89	246
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	229	229	0.01	0.01	0.02	232

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	166	166	0.01	0.01	0.27	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.5	27.5	< 0.005	< 0.005	0.05	27.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.67	2.25	20.8	20.6	0.03	0.89	—	0.89	0.82	—	0.82	—	3,784	3,784	0.15	0.03	—	3,797
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.80	3.76	0.01	0.16	—	0.16	0.15	—	0.15	—	627	627	0.03	0.01	—	629
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	1.13	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	237	237	0.01	0.01	0.80	241
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.96	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	0.01	0.01	0.02	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.72	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	163	163	0.01	0.01	0.25	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.0	27.0	< 0.005	< 0.005	0.04	27.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.59	2.18	20.0	20.2	0.03	0.84	—	0.84	0.77	—	0.77	—	3,784	3,784	0.15	0.03	—	3,797
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.65	3.69	0.01	0.15	—	0.15	0.14	—	0.14	—	627	627	0.03	0.01	—	629
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.05	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	233	233	0.01	0.01	0.72	236
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.89	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	220	220	< 0.005	0.01	0.02	223
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.67	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	160	160	< 0.005	0.01	0.22	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.5	26.5	< 0.005	< 0.005	0.04	26.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.61	3.04	27.5	28.4	0.05	1.14	—	1.14	1.05	—	1.05	—	5,300	5,300	0.21	0.04	—	5,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61	3.04	27.5	28.4	0.05	1.14	—	1.14	1.05	—	1.05	—	5,300	5,300	0.21	0.04	—	5,318
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.59	2.17	19.7	20.3	0.04	0.82	—	0.82	0.75	—	0.75	—	3,796	3,796	0.15	0.03	—	3,809
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.59	3.71	0.01	0.15	—	0.15	0.14	—	0.14	—	628	628	0.03	0.01	—	631
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.99	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	228	228	< 0.005	0.01	0.65	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	219

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.63	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	< 0.005	0.01	0.20	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.1	26.1	< 0.005	< 0.005	0.03	26.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.53	2.97	25.9	28.1	0.05	1.09	—	1.09	1.00	—	1.00	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.53	2.97	25.9	28.1	0.05	1.09	—	1.09	1.00	—	1.00	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	18.5	20.1	0.03	0.78	—	0.78	0.71	—	0.71	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.38	3.66	0.01	0.14	—	0.14	0.13	—	0.13	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.92	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	225	225	< 0.005	0.01	0.58	228
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.78	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	213	213	< 0.005	0.01	0.02	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.59	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.18	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	0.03	25.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.61. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47	2.92	25.2	28.4	0.05	1.07	—	1.07	0.98	—	0.98	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47	2.92	25.2	28.4	0.05	1.07	—	1.07	0.98	—	0.98	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.48	2.08	18.0	20.3	0.03	0.76	—	0.76	0.70	—	0.70	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.29	3.71	0.01	0.14	—	0.14	0.13	—	0.13	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.87	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	221	221	< 0.005	0.01	0.52	224
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.73	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	209	209	< 0.005	0.01	0.01	212
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	152	152	< 0.005	0.01	0.16	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.1	25.1	< 0.005	< 0.005	0.03	25.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.63. Site Preparation (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.41	2.87	24.3	27.9	0.05	1.04	—	1.04	0.96	—	0.96	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.41	2.87	24.3	27.9	0.05	1.04	—	1.04	0.96	—	0.96	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.44	2.05	17.4	19.9	0.03	0.75	—	0.75	0.69	—	0.69	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.17	3.64	0.01	0.14	—	0.14	0.13	—	0.13	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.81	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	218	218	< 0.005	< 0.005	0.46	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.69	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.01	209

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.51	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.14	151
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	0.02	25.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.65. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.30	1.94	16.0	18.4	0.04	0.66	—	0.66	0.61	—	0.61	—	3,793	3,793	0.15	0.03	—	3,806
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	2.91	3.37	0.01	0.12	—	0.12	0.11	—	0.11	—	628	628	0.03	0.01	—	630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.76	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	215	215	< 0.005	< 0.005	0.41	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.65	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	204	204	< 0.005	< 0.005	0.01	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.49	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.13	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.5	24.5	< 0.005	< 0.005	0.02	24.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.67. Site Preparation (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.13	2.63	21.2	24.4	0.05	0.86	—	0.86	0.79	—	0.79	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.13	2.63	21.2	24.4	0.05	0.86	—	0.86	0.79	—	0.79	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.88	15.1	17.4	0.03	0.62	—	0.62	0.57	—	0.57	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	2.76	3.18	0.01	0.11	—	0.11	0.10	—	0.10	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.72	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	212	212	< 0.005	< 0.005	0.36	212
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.61	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	201	201	< 0.005	< 0.005	0.01	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.46	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.11	146
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.1	24.1	< 0.005	< 0.005	0.02	24.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.69. Site Preparation (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.06	2.57	20.6	24.1	0.05	0.82	—	0.82	0.75	—	0.75	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.06	2.57	20.6	24.1	0.05	0.82	—	0.82	0.75	—	0.75	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.84	14.7	17.2	0.03	0.58	—	0.58	0.54	—	0.54	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	2.68	3.14	0.01	0.11	—	0.11	0.10	—	0.10	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.68	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	209	209	< 0.005	< 0.005	0.31	210
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.58	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	198	198	< 0.005	< 0.005	0.01	199

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.10	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.8	23.8	< 0.005	< 0.005	0.02	23.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.71. Site Preparation (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.93	2.46	19.2	22.9	0.05	0.74	—	0.74	0.68	—	0.68	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.93	2.46	19.2	22.9	0.05	0.74	—	0.74	0.68	—	0.68	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.09	1.76	13.7	16.3	0.03	0.53	—	0.53	0.48	—	0.48	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.50	2.98	0.01	0.10	—	0.10	0.09	—	0.09	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.65	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	207	207	< 0.005	< 0.005	0.27	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	196	196	< 0.005	< 0.005	0.01	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	142	142	< 0.005	< 0.005	0.08	143
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.01	23.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.73. Site Preparation (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	2.35	18.0	21.7	0.05	0.67	—	0.67	0.62	—	0.62	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	2.35	18.0	21.7	0.05	0.67	—	0.67	0.62	—	0.62	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.00	1.68	12.9	15.6	0.04	0.48	—	0.48	0.44	—	0.44	—	3,793	3,793	0.15	0.03	—	3,806
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.35	2.84	0.01	0.09	—	0.09	0.08	—	0.08	—	628	628	0.03	0.01	—	630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.62	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	205	205	< 0.005	< 0.005	0.23	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	195	195	< 0.005	< 0.005	0.01	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.39	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	141	141	< 0.005	< 0.005	0.07	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.4	23.4	< 0.005	< 0.005	0.01	23.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.75. Site Preparation (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.79	2.35	18.1	21.9	0.05	0.68	—	0.68	0.63	—	0.63	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	2.35	18.1	21.9	0.05	0.68	—	0.68	0.63	—	0.63	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.00	1.68	12.9	15.7	0.03	0.49	—	0.49	0.45	—	0.45	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.31	2.35	2.86	0.01	0.09	—	0.09	0.08	—	0.08	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.59	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	203	203	< 0.005	< 0.005	0.20	204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.50	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	193	193	< 0.005	< 0.005	0.01	193

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.38	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	140	140	< 0.005	< 0.005	0.06	140
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.2	23.2	< 0.005	< 0.005	0.01	23.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.77. Site Preparation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89	1.59	11.8	14.5	0.03	0.44	—	0.44	0.40	—	0.40	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	2.15	2.65	0.01	0.08	—	0.08	0.07	—	0.07	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.58	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	202	202	< 0.005	< 0.005	0.17	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.48	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	192	192	< 0.005	< 0.005	< 0.005	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.36	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	139	139	< 0.005	< 0.005	0.05	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.01	23.1

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.79. Site Preparation (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.60	2.19	16.0	20.0	0.05	0.59	—	0.59	0.54	—	0.54	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.60	2.19	16.0	20.0	0.05	0.59	—	0.59	0.54	—	0.54	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.86	1.56	11.5	14.3	0.03	0.42	—	0.42	0.39	—	0.39	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.09	2.61	0.01	0.08	—	0.08	0.07	—	0.07	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.56	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	201	201	< 0.005	< 0.005	0.15	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	191	191	< 0.005	< 0.005	< 0.005	191
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.35	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	0.05	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.01	22.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.81. Site Preparation (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.58	2.17	15.9	19.8	0.05	0.58	—	0.58	0.53	—	0.53	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.58	2.17	15.9	19.8	0.05	0.58	—	0.58	0.53	—	0.53	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.55	11.4	14.2	0.04	0.42	—	0.42	0.38	—	0.38	—	3,793	3,793	0.15	0.03	—	3,806
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.08	2.59	0.01	0.08	—	0.08	0.07	—	0.07	—	628	628	0.03	0.01	—	630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.54	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	200	200	< 0.005	< 0.005	0.13	200
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.46	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	189	189	< 0.005	< 0.005	< 0.005	190

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.35	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	0.04	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.01	22.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.83. Site Preparation (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.05	14.7	19.1	0.05	0.50	—	0.50	0.46	—	0.46	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.05	14.7	19.1	0.05	0.50	—	0.50	0.46	—	0.46	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	1.46	10.5	13.7	0.03	0.36	—	0.36	0.33	—	0.33	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	1.92	2.49	0.01	0.07	—	0.07	0.06	—	0.06	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.53	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	199	199	< 0.005	< 0.005	0.11	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.45	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	188	188	< 0.005	< 0.005	< 0.005	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.33	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	0.03	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.6	22.6	< 0.005	< 0.005	0.01	22.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.85. Site Preparation (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	14.3	18.7	0.05	0.49	—	0.49	0.45	—	0.45	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	14.3	18.7	0.05	0.49	—	0.49	0.45	—	0.45	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.72	1.44	10.2	13.4	0.03	0.35	—	0.35	0.32	—	0.32	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	1.87	2.44	0.01	0.06	—	0.06	0.06	—	0.06	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.51	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	198	198	< 0.005	< 0.005	0.09	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.43	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	188	188	< 0.005	< 0.005	< 0.005	188
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.33	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	136	136	< 0.005	< 0.005	0.03	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.5	22.5	< 0.005	< 0.005	< 0.005	22.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.87. Site Preparation (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.39	2.01	14.5	18.6	0.05	0.48	—	0.48	0.44	—	0.44	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.39	2.01	14.5	18.6	0.05	0.48	—	0.48	0.44	—	0.44	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.71	1.44	10.3	13.3	0.03	0.34	—	0.34	0.32	—	0.32	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	1.89	2.43	0.01	0.06	—	0.06	0.06	—	0.06	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.50	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	197	197	< 0.005	< 0.005	0.08	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.42	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	187	187	< 0.005	< 0.005	< 0.005	187

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.32	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	135	135	< 0.005	< 0.005	0.03	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.4	22.4	< 0.005	< 0.005	< 0.005	22.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.89. Site Preparation (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	13.4	17.9	0.05	0.42	—	0.42	0.39	—	0.39	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	13.4	17.9	0.05	0.42	—	0.42	0.39	—	0.39	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	9.57	12.8	0.04	0.30	—	0.30	0.28	—	0.28	—	3,793	3,793	0.15	0.03	—	3,806
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.75	2.34	0.01	0.06	—	0.06	0.05	—	0.05	—	628	628	0.03	0.01	—	630
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.50	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	196	196	< 0.005	< 0.005	0.07	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.42	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	186	186	< 0.005	< 0.005	< 0.005	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.32	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	135	135	< 0.005	< 0.005	0.02	136
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.4	22.4	< 0.005	< 0.005	< 0.005	22.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.91. Site Preparation (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	13.3	17.9	0.05	0.42	—	0.42	0.39	—	0.39	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	13.3	17.9	0.05	0.42	—	0.42	0.39	—	0.39	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	9.51	12.8	0.03	0.30	—	0.30	0.28	—	0.28	—	3,783	3,783	0.15	0.03	—	3,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.74	2.34	0.01	0.05	—	0.05	0.05	—	0.05	—	626	626	0.03	0.01	—	628
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.50	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	196	196	< 0.005	< 0.005	0.06	196
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.41	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	186	186	< 0.005	< 0.005	< 0.005	186
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.31	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	135	135	< 0.005	< 0.005	0.02	135
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.3	22.3	< 0.005	< 0.005	< 0.005	22.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.93. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.72	5.65	0.01	0.29	—	0.29	0.26	—	0.26	—	1,188	1,188	0.05	0.01	—	1,192
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.23	1.03	< 0.005	0.05	—	0.05	0.05	—	0.05	—	197	197	0.01	< 0.005	—	197
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.39	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	274	274	0.01	0.01	0.03	277
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.0	50.0	< 0.005	< 0.005	0.10	50.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.28	8.28	< 0.005	< 0.005	0.02	8.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.95. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.00	2.52	24.6	21.6	0.04	1.04	—	1.04	0.95	—	0.95	—	4,726	4,726	0.19	0.04	—	4,742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.48	3.94	0.01	0.19	—	0.19	0.17	—	0.17	—	782	782	0.03	0.01	—	785

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.51	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	282	282	0.01	0.01	1.11	287
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.11	1.28	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	268	268	0.01	0.01	0.03	271
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.96	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	195	195	0.01	0.01	0.34	197
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.2	32.2	< 0.005	< 0.005	0.06	32.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.97. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.28	21.2	20.2	0.04	0.88	—	0.88	0.81	—	0.81	—	4,713	4,713	0.19	0.04	—	4,730
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.87	3.69	0.01	0.16	—	0.16	0.15	—	0.15	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.39	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	277	277	0.01	0.01	1.01	281
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.18	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	262	262	0.01	0.01	0.03	265
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	0.01	0.01	0.31	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	0.05	31.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.99. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.59	2.17	19.4	19.7	0.04	0.80	—	0.80	0.74	—	0.74	—	4,713	4,713	0.19	0.04	—	4,729
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.55	3.59	0.01	0.15	—	0.15	0.13	—	0.13	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.29	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	271	271	0.01	0.01	0.92	275
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	0.01	0.01	0.02	260
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.82	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	186	186	0.01	0.01	0.28	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	0.05	31.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.101. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.50	2.10	18.3	19.5	0.04	0.75	—	0.75	0.69	—	0.69	—	4,713	4,713	0.19	0.04	—	4,729
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.38	3.33	3.56	0.01	0.14	—	0.14	0.13	—	0.13	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.20	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	266	266	0.01	0.01	0.83	270
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.02	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	252	252	< 0.005	0.01	0.02	255
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	183	183	< 0.005	0.01	0.25	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.2	30.2	< 0.005	< 0.005	0.04	30.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.103. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.45	2.06	17.4	19.5	0.04	0.71	—	0.71	0.65	—	0.65	—	4,726	4,726	0.19	0.04	—	4,742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	3.18	3.55	0.01	0.13	—	0.13	0.12	—	0.12	—	782	782	0.03	0.01	—	785
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	1.13	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	261	261	< 0.005	0.01	0.74	265
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.96	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	247	247	< 0.005	0.01	0.02	250
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.72	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	180	180	< 0.005	0.01	0.23	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.8	29.8	< 0.005	< 0.005	0.04	30.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.105. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.37	1.99	16.2	19.2	0.04	0.65	—	0.65	0.60	—	0.60	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	2.96	3.50	0.01	0.12	—	0.12	0.11	—	0.11	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	1.05	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	257	257	< 0.005	0.01	0.67	260
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.89	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	243	243	< 0.005	0.01	0.02	246
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.67	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.21	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.2	29.2	< 0.005	< 0.005	0.03	29.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.107. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.23	2.72	21.7	26.9	0.06	0.88	—	0.88	0.81	—	0.81	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.23	2.72	21.7	26.9	0.06	0.88	—	0.88	0.81	—	0.81	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.94	15.5	19.2	0.04	0.63	—	0.63	0.58	—	0.58	—	4,711	4,711	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.42	0.35	2.82	3.50	0.01	0.12	—	0.12	0.11	—	0.11	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.99	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	252	252	< 0.005	0.01	0.59	256
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.84	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	239	239	< 0.005	0.01	0.02	242
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.63	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	173	173	< 0.005	0.01	0.18	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.7	28.7	< 0.005	< 0.005	0.03	29.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.109. Grading (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.17	2.66	20.6	26.6	0.06	0.86	—	0.86	0.79	—	0.79	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.17	2.66	20.6	26.6	0.06	0.86	—	0.86	0.79	—	0.79	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	14.7	19.0	0.04	0.61	—	0.61	0.56	—	0.56	—	4,711	4,711	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.35	2.69	3.47	0.01	0.11	—	0.11	0.10	—	0.10	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.93	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	249	249	< 0.005	< 0.005	0.53	250
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.79	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	236	236	< 0.005	0.01	0.01	239
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.59	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.16	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	0.03	28.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.111. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.84	13.9	18.5	0.04	0.57	—	0.57	0.52	—	0.52	—	4,724	4,724	0.19	0.04	—	4,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.33	2.54	3.37	0.01	0.10	—	0.10	0.10	—	0.10	—	782	782	0.03	0.01	—	785
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.87	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	245	245	< 0.005	< 0.005	0.46	246
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.74	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	233	233	< 0.005	< 0.005	0.01	233
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.55	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.14	171
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.02	28.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.113. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.12	1.79	13.2	18.0	0.04	0.52	—	0.52	0.48	—	0.48	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.39	0.33	2.42	3.29	0.01	0.10	—	0.10	0.09	—	0.09	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.83	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	242	242	< 0.005	< 0.005	0.41	243
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.70	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	230	230	< 0.005	< 0.005	0.01	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.53	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	166	166	< 0.005	< 0.005	0.13	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.5	27.5	< 0.005	< 0.005	0.02	27.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.115. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.44	17.8	25.1	0.06	0.68	—	0.68	0.62	—	0.62	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.44	17.8	25.1	0.06	0.68	—	0.68	0.62	—	0.62	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	12.7	17.9	0.04	0.48	—	0.48	0.45	—	0.45	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.31	3.27	0.01	0.09	—	0.09	0.08	—	0.08	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.78	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	239	239	< 0.005	< 0.005	0.36	240
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.66	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	227	227	< 0.005	< 0.005	0.01	227
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.49	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.11	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.2	27.2	< 0.005	< 0.005	0.02	27.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.117. Grading (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.81	2.36	16.8	24.6	0.06	0.62	—	0.62	0.57	—	0.57	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.81	2.36	16.8	24.6	0.06	0.62	—	0.62	0.57	—	0.57	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.01	1.69	12.0	17.6	0.04	0.45	—	0.45	0.41	—	0.41	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.19	3.21	0.01	0.08	—	0.08	0.07	—	0.07	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.74	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	237	237	< 0.005	< 0.005	0.31	237
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.63	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	224	224	< 0.005	< 0.005	0.01	225
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	163	163	< 0.005	< 0.005	0.09	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.9	26.9	< 0.005	< 0.005	0.02	27.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.119. Grading (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.71	2.28	15.9	24.1	0.06	0.58	—	0.58	0.53	—	0.53	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.71	2.28	15.9	24.1	0.06	0.58	—	0.58	0.53	—	0.53	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.94	1.63	11.4	17.3	0.04	0.41	—	0.41	0.38	—	0.38	—	4,724	4,724	0.19	0.04	—	4,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	0.30	2.07	3.15	0.01	0.08	—	0.08	0.07	—	0.07	—	782	782	0.03	0.01	—	785
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.71	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	235	235	< 0.005	< 0.005	0.27	235
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.60	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	223	223	< 0.005	< 0.005	0.01	223
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	162	162	< 0.005	< 0.005	0.08	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.8	26.8	< 0.005	< 0.005	0.01	26.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.121. Grading (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.66	2.23	15.3	23.9	0.06	0.56	—	0.56	0.51	—	0.51	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.66	2.23	15.3	23.9	0.06	0.56	—	0.56	0.51	—	0.51	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.59	10.9	17.1	0.04	0.40	—	0.40	0.37	—	0.37	—	4,711	4,711	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.29	1.99	3.12	0.01	0.07	—	0.07	0.07	—	0.07	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.68	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	233	233	< 0.005	< 0.005	0.23	233
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.57	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	221	221	< 0.005	< 0.005	0.01	221
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.43	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	160	160	< 0.005	< 0.005	0.07	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.5	26.5	< 0.005	< 0.005	0.01	26.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.123. Grading (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.54	10.2	16.5	0.04	0.37	—	0.37	0.34	—	0.34	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	1.87	3.02	0.01	0.07	—	0.07	0.06	—	0.06	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.66	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	231	231	< 0.005	< 0.005	0.20	232
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.55	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	219	219	< 0.005	< 0.005	0.01	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.42	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	159	159	< 0.005	< 0.005	0.06	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.3	26.3	< 0.005	< 0.005	0.01	26.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.125. Grading (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	13.8	22.7	0.06	0.50	—	0.50	0.46	—	0.46	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	13.8	22.7	0.06	0.50	—	0.50	0.46	—	0.46	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.80	1.51	9.86	16.2	0.04	0.35	—	0.35	0.33	—	0.33	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	1.80	2.96	0.01	0.06	—	0.06	0.06	—	0.06	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.64	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	230	230	< 0.005	< 0.005	0.17	230
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	218	218	< 0.005	< 0.005	< 0.005	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	158	158	< 0.005	< 0.005	0.05	158
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.1	26.1	< 0.005	< 0.005	0.01	26.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.127. Grading (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.49	2.10	13.5	22.5	0.06	0.48	—	0.48	0.44	—	0.44	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.49	2.10	13.5	22.5	0.06	0.48	—	0.48	0.44	—	0.44	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.79	1.50	9.66	16.1	0.04	0.35	—	0.35	0.32	—	0.32	—	4,724	4,724	0.19	0.04	—	4,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.27	1.76	2.94	0.01	0.06	—	0.06	0.06	—	0.06	—	782	782	0.03	0.01	—	785
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.62	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	228	228	< 0.005	< 0.005	0.15	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.52	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	217	217	< 0.005	< 0.005	< 0.005	217
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	157	157	< 0.005	< 0.005	0.05	158
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.0	26.0	< 0.005	< 0.005	0.01	26.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.129. Grading (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.43	2.04	12.9	22.1	0.06	0.45	—	0.45	0.41	—	0.41	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.43	2.04	12.9	22.1	0.06	0.45	—	0.45	0.41	—	0.41	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.73	1.46	9.20	15.8	0.04	0.32	—	0.32	0.29	—	0.29	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	1.68	2.88	0.01	0.06	—	0.06	0.05	—	0.05	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.60	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	227	227	< 0.005	< 0.005	0.13	227
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.51	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	215	215	< 0.005	< 0.005	< 0.005	216
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.38	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	156	156	< 0.005	< 0.005	0.04	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.8	25.8	< 0.005	< 0.005	0.01	25.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.131. Grading (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	12.5	21.7	0.06	0.43	—	0.43	0.40	—	0.40	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.40	2.02	12.5	21.7	0.06	0.43	—	0.43	0.40	—	0.40	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.71	1.44	8.96	15.5	0.04	0.31	—	0.31	0.28	—	0.28	—	4,712	4,712	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.31	0.26	1.63	2.83	0.01	0.06	—	0.06	0.05	—	0.05	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.59	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	226	226	< 0.005	< 0.005	0.11	226
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.49	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	214	214	< 0.005	< 0.005	< 0.005	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.37	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	155	155	< 0.005	< 0.005	0.03	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.7	25.7	< 0.005	< 0.005	0.01	25.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.133. Grading (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.38	2.00	12.4	21.6	0.06	0.42	—	0.42	0.38	—	0.38	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.38	2.00	12.4	21.6	0.06	0.42	—	0.42	0.38	—	0.38	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.43	8.87	15.4	0.04	0.30	—	0.30	0.27	—	0.27	—	4,711	4,711	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	1.62	2.81	0.01	0.05	—	0.05	0.05	—	0.05	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.58	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	225	225	< 0.005	< 0.005	0.09	225
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.48	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	214	214	< 0.005	< 0.005	< 0.005	214
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.37	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	155	155	< 0.005	< 0.005	0.03	155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.6	25.6	< 0.005	< 0.005	< 0.005	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.135. Grading (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.33	1.96	11.8	21.1	0.06	0.39	—	0.39	0.36	—	0.36	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.33	1.96	11.8	21.1	0.06	0.39	—	0.39	0.36	—	0.36	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	1.40	8.49	15.1	0.04	0.28	—	0.28	0.26	—	0.26	—	4,724	4,724	0.19	0.04	—	4,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.26	1.55	2.76	0.01	0.05	—	0.05	0.05	—	0.05	—	782	782	0.03	0.01	—	785
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.57	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	224	224	< 0.005	< 0.005	0.08	225
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.48	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	213	213	< 0.005	< 0.005	< 0.005	213
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.19	0.19	0.00	0.04	0.04	—	155	155	< 0.005	< 0.005	0.02	155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.6	25.6	< 0.005	< 0.005	< 0.005	25.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.137. Grading (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.94	11.6	21.0	0.06	0.38	—	0.38	0.35	—	0.35	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.94	11.6	21.0	0.06	0.38	—	0.38	0.35	—	0.35	—	6,596	6,596	0.27	0.05	—	6,619
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	1.38	8.32	15.0	0.04	0.27	—	0.27	0.25	—	0.25	—	4,711	4,711	0.19	0.04	—	4,728
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	0.25	1.52	2.73	0.01	0.05	—	0.05	0.05	—	0.05	—	780	780	0.03	0.01	—	783
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.57	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	224	224	< 0.005	< 0.005	0.07	224
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.47	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	212	212	< 0.005	< 0.005	< 0.005	213
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	154	154	< 0.005	< 0.005	0.02	154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	< 0.005	25.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.139. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.8	13.2	0.02	0.55	—	0.55	0.51	—	0.51	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.13	2.37	< 0.005	0.10	—	0.10	0.09	—	0.09	—	432	432	0.02	< 0.005	—	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	71.5	71.5	< 0.005	< 0.005	—	71.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	55.6	46.4	61.1	693	0.00	0.00	131	131	0.00	30.6	30.6	—	136,666	136,666	6.28	4.96	15.8	138,316
Vendor	9.22	4.40	152	74.3	0.82	1.64	31.3	32.9	1.64	8.64	10.3	—	119,723	119,723	4.82	16.3	8.31	124,701
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.97	8.31	11.0	131	0.00	0.00	23.2	23.2	0.00	5.44	5.44	—	24,972	24,972	1.13	0.89	47.5	25,314
Vendor	1.68	0.79	27.5	13.2	0.15	0.30	5.58	5.88	0.30	1.54	1.84	—	21,550	21,550	0.87	2.93	25.0	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.82	1.52	2.00	23.9	0.00	0.00	4.24	4.24	0.00	0.99	0.99	—	4,134	4,134	0.19	0.15	7.87	4,191
Vendor	0.31	0.14	5.03	2.42	0.03	0.05	1.02	1.07	0.05	0.28	0.34	—	3,568	3,568	0.14	0.48	4.14	3,720
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.141. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	0.86	8.04	9.39	0.02	0.36	—	0.36	0.33	—	0.33	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	1.71	< 0.005	0.07	—	0.07	0.06	—	0.06	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	49.8	44.8	47.8	754	0.00	0.00	131	131	0.00	30.6	30.6	—	141,055	141,055	5.84	4.74	556	143,168
Vendor	9.30	3.58	139	68.2	0.82	1.64	31.3	32.9	1.64	8.64	10.3	—	117,981	117,981	4.82	16.3	320	123,270
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	49.3	44.2	56.6	637	0.00	0.00	131	131	0.00	30.6	30.6	—	133,684	133,684	6.06	4.96	14.4	135,327
Vendor	9.22	3.50	144	69.7	0.82	1.64	31.3	32.9	1.64	8.64	10.3	—	118,030	118,030	4.82	16.3	8.29	123,008
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	35.2	31.5	40.4	480	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	97,173	97,173	4.34	3.55	172	98,511
Vendor	6.66	2.56	105	49.4	0.59	1.18	22.2	23.4	1.18	6.14	7.32	—	84,518	84,518	3.45	11.7	98.5	88,176
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.42	5.74	7.37	87.6	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	16,088	16,088	0.72	0.59	28.5	16,310
Vendor	1.22	0.47	19.1	9.01	0.11	0.21	4.05	4.27	0.21	1.12	1.34	—	13,993	13,993	0.57	1.93	16.3	14,598
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.143. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.46	9.31	0.02	0.31	—	0.31	0.28	—	0.28	—	1,713	1,713	0.07	0.01	—	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.36	1.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	47.8	42.8	43.3	695	0.00	0.00	131	131	0.00	30.6	30.6	—	138,129	138,129	5.84	4.74	506	140,192
Vendor	8.32	3.42	132	64.5	0.82	1.64	31.3	32.9	0.82	8.64	9.47	—	116,023	116,023	4.82	16.3	318	121,310
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	47.4	42.4	48.0	589	0.00	0.00	131	131	0.00	30.6	30.6	—	130,928	130,928	6.06	4.96	13.1	132,569
Vendor	8.24	3.34	138	65.2	0.82	1.64	31.3	32.9	0.82	8.64	9.47	—	116,077	116,077	4.82	16.3	8.24	121,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	33.7	30.1	37.0	442	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	94,907	94,907	4.33	3.38	156	96,179
Vendor	5.89	2.38	98.8	46.1	0.59	1.17	22.1	23.3	0.59	6.12	6.71	—	82,890	82,890	3.44	11.6	98.3	86,537
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.14	5.50	6.76	80.7	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	15,713	15,713	0.72	0.56	25.8	15,924
Vendor	1.07	0.44	18.0	8.41	0.11	0.21	4.04	4.25	0.11	1.12	1.22	—	13,723	13,723	0.57	1.92	16.3	14,327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.145. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	41.5	36.8	38.8	645	0.00	0.00	131	131	0.00	30.6	30.6	—	135,352	135,352	5.62	4.74	458	137,362
Vendor	8.24	3.42	126	60.8	0.82	1.64	31.3	32.9	0.82	8.64	9.47	—	114,016	114,016	4.74	16.3	308	119,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	41.5	36.6	43.5	551	0.00	0.00	131	131	0.00	30.6	30.6	—	128,315	128,315	5.84	4.74	11.9	129,884

Vendor	8.08	3.26	131	62.3	0.82	1.64	31.3	32.9	0.82	8.64	9.47	—	114,074	114,074	4.74	16.3	8.00	119,049
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	29.5	26.0	33.8	412	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	93,006	93,006	4.17	3.38	142	94,260
Vendor	5.83	2.38	94.4	44.0	0.59	1.17	22.1	23.3	0.59	6.12	6.71	—	81,457	81,457	3.39	11.6	94.9	85,100
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.38	4.74	6.17	75.1	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	15,398	15,398	0.69	0.56	23.4	15,606
Vendor	1.06	0.44	17.2	8.03	0.11	0.21	4.04	4.25	0.11	1.12	1.22	—	13,486	13,486	0.56	1.92	15.7	14,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.147. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	40.2	35.5	34.5	600	0.00	0.00	131	131	0.00	30.6	30.6	—	132,761	132,761	5.62	4.74	414	134,727
Vendor	7.34	3.42	120	57.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	111,810	111,810	4.74	15.4	292	116,823
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	39.8	34.8	43.1	508	0.00	0.00	131	131	0.00	30.6	30.6	—	125,865	125,865	1.76	4.74	10.7	127,331
Vendor	7.18	3.26	125	58.6	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	111,871	111,871	4.74	15.4	7.57	116,601
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	28.4	24.9	30.8	382	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	91,230	91,230	1.26	3.38	127	92,397
Vendor	5.24	2.38	90.0	41.4	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	79,882	79,882	3.39	11.0	89.9	83,345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	4.54	5.61	69.7	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	15,104	15,104	0.21	0.56	21.1	15,297

Vendor	0.96	0.44	16.4	7.56	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	13,225	13,225	0.56	1.83	14.9	13,799
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.149. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.39	9.26	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.17	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	38.9	34.1	34.0	563	0.00	0.00	131	131	0.00	30.6	30.6	—	130,385	130,385	1.32	4.74	372	132,201
Vendor	7.34	2.60	115	55.4	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	109,201	109,201	3.92	15.4	276	114,155
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	38.7	33.9	38.8	479	0.00	0.00	131	131	0.00	30.6	30.6	—	123,621	123,621	1.54	4.74	9.61	125,081
Vendor	7.18	2.43	120	55.9	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	109,266	109,266	3.92	15.4	7.16	113,975
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	27.5	24.1	27.6	359	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	89,850	89,850	1.10	3.39	115	91,003
Vendor	5.20	1.80	86.3	39.5	0.59	0.59	22.2	22.8	0.59	6.14	6.73	—	78,234	78,234	2.81	11.1	85.1	81,687
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.02	4.40	5.04	65.5	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	14,876	14,876	0.18	0.56	19.1	15,067
Vendor	0.95	0.33	15.7	7.22	0.11	0.11	4.05	4.16	0.11	1.12	1.23	—	12,953	12,953	0.46	1.83	14.1	13,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.151. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.13	9.22	0.02	0.20	—	0.20	0.18	—	0.18	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.12	1.68	< 0.005	0.04	—	0.04	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	37.6	32.8	29.7	527	0.00	0.00	131	131	0.00	30.6	30.6	—	128,165	128,165	1.32	4.74	333	129,942
Vendor	7.34	2.52	109	52.7	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	106,312	106,312	3.84	15.4	260	111,247
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	33.0	32.4	34.2	446	0.00	0.00	131	131	0.00	30.6	30.6	—	121,530	121,530	1.54	4.74	8.62	122,989

Vendor	7.09	2.35	114	53.9	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	106,380	106,380	3.84	15.4	6.75	111,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.4	23.0	24.5	334	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	88,085	88,085	1.10	3.38	103	89,223
Vendor	5.13	1.74	82.1	38.0	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	75,958	75,958	2.74	11.0	80.2	79,377
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.28	4.19	4.46	61.0	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	14,583	14,583	0.18	0.56	17.0	14,772
Vendor	0.94	0.32	15.0	6.94	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	12,576	12,576	0.45	1.82	13.3	13,142
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.153. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.99	9.20	0.02	0.19	—	0.19	0.17	—	0.17	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.09	1.68	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	32.2	31.5	25.4	495	0.00	0.00	131	131	0.00	30.6	30.6	—	126,086	126,086	1.32	4.74	296	127,826
Vendor	6.35	2.43	105	50.8	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	103,193	103,193	3.84	14.5	246	107,869
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	31.7	31.1	30.0	417	0.00	0.00	131	131	0.00	30.6	30.6	—	119,568	119,568	1.32	4.74	7.69	121,019
Vendor	6.27	2.27	110	52.0	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	103,263	103,263	3.84	14.5	6.36	107,700
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.5	22.0	21.4	314	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	86,660	86,660	0.94	3.38	91.1	87,783
Vendor	4.54	1.68	78.2	36.7	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	73,730	73,730	2.74	10.4	75.7	76,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	4.02	3.90	57.3	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	14,348	14,348	0.16	0.56	15.1	14,533

Vendor	0.83	0.31	14.3	6.69	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	12,207	12,207	0.45	1.72	12.5	12,743
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.155. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	5.80	9.18	0.02	0.17	—	0.17	0.16	—	0.16	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.06	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	30.6	25.9	25.2	463	0.00	0.00	131	131	0.00	30.6	30.6	—	124,175	124,175	1.10	0.66	263	124,662
Vendor	6.35	2.43	99.9	49.0	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	99,811	99,811	3.76	14.5	232	104,471
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	30.2	25.7	29.7	393	0.00	0.00	131	131	0.00	30.6	30.6	—	117,770	117,770	1.32	4.74	6.82	119,221
Vendor	6.11	2.27	105	49.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	99,883	99,883	3.76	14.5	6.00	104,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	21.7	18.3	21.1	293	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	85,356	85,356	0.94	3.38	81.2	86,468
Vendor	4.48	1.68	74.9	35.4	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	71,315	71,315	2.68	10.4	71.3	74,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.96	3.34	3.85	53.5	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	14,132	14,132	0.16	0.56	13.4	14,316
Vendor	0.82	0.31	13.7	6.46	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	11,807	11,807	0.44	1.72	11.8	12,343
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.157. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	5.64	9.16	0.02	0.16	—	0.16	0.15	—	0.15	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.03	1.67	< 0.005	0.03	—	0.03	0.03	—	0.03	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	29.3	24.8	20.9	436	0.00	0.00	131	131	0.00	30.6	30.6	—	122,495	122,495	1.10	0.66	232	122,952
Vendor	6.27	2.43	96.2	47.1	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	96,434	96,434	3.76	13.7	219	100,836
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	29.1	24.6	25.4	368	0.00	0.00	131	131	0.00	30.6	30.6	—	116,182	116,182	1.32	0.66	6.00	116,418

Vendor	6.11	2.27	100	48.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	96,507	96,507	3.76	13.7	5.67	100,696
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.8	17.4	18.1	277	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	84,432	84,432	0.95	3.39	71.8	85,538
Vendor	4.43	1.69	71.8	34.2	0.59	0.59	22.2	22.8	0.59	6.14	6.73	—	69,092	69,092	2.69	9.83	67.6	72,156
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.80	3.18	3.30	50.6	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	13,979	13,979	0.16	0.56	11.9	14,162
Vendor	0.81	0.31	13.1	6.24	0.11	0.11	4.05	4.16	0.11	1.12	1.23	—	11,439	11,439	0.45	1.63	11.2	11,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.159. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.48	9.13	0.02	0.15	—	0.15	0.13	—	0.13	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.00	1.67	< 0.005	0.03	—	0.03	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	28.4	23.9	20.7	413	0.00	0.00	131	131	0.00	30.6	30.6	—	120,871	120,871	1.10	0.66	204	121,299
Vendor	6.27	2.43	92.4	45.4	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	93,160	93,160	3.76	13.7	208	97,551
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	28.0	23.5	21.1	349	0.00	0.00	131	131	0.00	30.6	30.6	—	114,650	114,650	1.10	0.66	5.28	114,880
Vendor	6.11	2.27	96.6	46.5	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	93,236	93,236	3.76	13.7	5.40	97,424
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.0	16.8	18.0	262	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	83,090	83,090	0.79	0.47	62.8	83,313
Vendor	4.42	1.68	68.9	32.8	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	66,566	66,566	2.68	9.80	64.1	69,618
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.65	3.06	3.29	47.9	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,756	13,756	0.13	0.08	10.4	13,793

Vendor	0.81	0.31	12.6	5.98	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	11,021	11,021	0.44	1.62	10.6	11,526
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.161. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.37	9.12	0.02	0.14	—	0.14	0.13	—	0.13	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.98	1.66	< 0.005	0.03	—	0.03	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.2	22.8	16.4	390	0.00	0.00	131	131	0.00	30.6	30.6	—	119,451	119,451	1.10	0.66	178	119,854
Vendor	5.45	2.43	88.7	43.6	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	89,953	89,953	2.93	12.9	199	94,069
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	23.0	22.6	20.9	329	0.00	0.00	131	131	0.00	30.6	30.6	—	113,307	113,307	1.10	0.66	4.61	113,536
Vendor	5.29	2.27	92.9	44.7	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	90,030	90,030	2.93	12.9	5.17	93,952
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.3	16.0	14.9	246	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	82,116	82,116	0.79	0.47	54.9	82,331
Vendor	3.84	1.68	66.2	31.5	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	64,275	64,275	2.10	9.21	61.5	67,135
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.97	2.91	2.73	44.8	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,595	13,595	0.13	0.08	9.10	13,631
Vendor	0.70	0.31	12.1	5.75	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	10,641	10,641	0.35	1.53	10.2	11,115
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.163. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	5.24	9.06	0.02	0.13	—	0.13	0.12	—	0.12	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.6	22.1	16.4	371	0.00	0.00	131	131	0.00	30.6	30.6	—	118,193	118,193	0.88	0.66	154	118,567
Vendor	5.45	2.43	85.8	42.6	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	86,892	86,892	2.85	12.9	88.6	90,896
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.4	21.9	20.9	314	0.00	0.00	131	131	0.00	30.6	30.6	—	112,118	112,118	1.10	0.66	4.00	112,346

Vendor	5.21	2.27	90.0	43.6	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	86,970	86,970	2.85	12.9	2.29	90,888
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.0	15.7	14.8	235	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	81,255	81,255	0.79	0.47	47.4	81,463
Vendor	3.84	1.68	64.1	30.8	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	62,089	62,089	2.04	9.21	27.3	64,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.91	2.86	2.70	42.9	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,453	13,453	0.13	0.08	7.86	13,487
Vendor	0.70	0.31	11.7	5.62	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	10,280	10,280	0.34	1.53	4.52	10,747
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.165. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.10	9.03	0.02	0.12	—	0.12	0.11	—	0.11	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.93	1.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.1	21.7	16.2	353	0.00	0.00	131	131	0.00	30.6	30.6	—	117,161	117,161	0.88	0.66	134	117,514
Vendor	5.37	2.43	83.0	41.7	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	84,030	84,030	2.85	12.1	74.1	87,775
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	22.1	21.7	16.6	300	0.00	0.00	131	131	0.00	30.6	30.6	—	111,146	111,146	1.10	0.66	3.47	111,374
Vendor	5.21	2.27	87.2	42.7	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	84,110	84,110	2.85	12.1	1.92	87,782
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.7	15.4	11.9	225	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	80,767	80,767	0.79	0.47	41.4	80,969
Vendor	3.85	1.69	62.3	30.3	0.59	0.59	22.2	22.8	0.59	6.14	6.73	—	60,210	60,210	2.04	8.65	22.9	62,862
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.86	2.81	2.17	41.1	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	13,372	13,372	0.13	0.08	6.85	13,405

Vendor	0.70	0.31	11.4	5.52	0.11	0.11	4.05	4.16	0.11	1.12	1.23	—	9,968	9,968	0.34	1.43	3.79	10,407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.167. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	4.99	8.93	0.02	0.11	—	0.11	0.10	—	0.10	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.91	1.63	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	21.3	20.8	16.2	339	0.00	0.00	131	131	0.00	30.6	30.6	—	116,168	116,168	0.88	0.66	115	116,502
Vendor	5.37	2.35	81.0	40.8	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	81,477	81,477	2.85	12.1	61.4	85,209
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	21.3	21.0	16.4	286	0.00	0.00	131	131	0.00	30.6	30.6	—	110,205	110,205	0.88	0.66	2.99	110,426
Vendor	5.21	2.27	85.2	41.8	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	81,557	81,557	2.85	12.1	1.59	85,229
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	15.2	14.9	11.7	215	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	79,865	79,865	0.63	0.47	35.6	80,057
Vendor	3.78	1.62	60.7	29.5	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	58,222	58,222	2.04	8.63	18.9	60,862
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.77	2.71	2.14	39.1	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,223	13,223	0.10	0.08	5.90	13,254
Vendor	0.69	0.30	11.1	5.38	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	9,639	9,639	0.34	1.43	3.13	10,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.169. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	4.92	8.90	0.02	0.11	—	0.11	0.10	—	0.10	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.90	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.6	20.2	16.0	329	0.00	0.00	131	131	0.00	30.6	30.6	—	115,449	115,449	0.88	0.66	99.6	115,768
Vendor	5.29	2.35	79.0	39.1	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	79,176	79,176	2.77	11.3	50.3	82,650
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	20.6	20.4	16.4	276	0.00	0.00	131	131	0.00	30.6	30.6	—	109,522	109,522	0.88	0.66	2.58	109,743

Vendor	5.21	2.19	82.5	40.1	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	79,257	79,257	2.77	11.3	1.31	82,682
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	14.7	14.4	11.7	208	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	79,372	79,372	0.63	0.47	30.7	79,559
Vendor	3.78	1.62	58.7	28.2	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	56,579	56,579	1.98	8.04	15.5	59,040
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.68	2.63	2.14	37.9	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,141	13,141	0.10	0.08	5.08	13,172
Vendor	0.69	0.30	10.7	5.15	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	9,367	9,367	0.33	1.33	2.57	9,775
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.171. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.57	4.84	8.86	0.02	0.10	—	0.10	0.10	—	0.10	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.10	0.88	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	19.9	19.7	11.9	320	0.00	0.00	131	131	0.00	30.6	30.6	—	114,679	114,679	0.88	0.66	85.7	114,983
Vendor	5.29	2.35	77.1	38.2	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	77,120	77,120	2.77	11.3	40.7	80,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	19.9	19.7	16.4	266	0.00	0.00	131	131	0.00	30.6	30.6	—	108,792	108,792	0.88	0.66	2.21	109,013
Vendor	5.13	2.19	80.6	39.2	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	77,203	77,203	2.77	11.3	1.06	80,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	14.2	13.9	11.6	201	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	78,839	78,839	0.63	0.47	26.3	79,021
Vendor	3.72	1.62	58.0	27.6	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	55,110	55,110	1.98	8.04	12.5	57,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.60	2.54	2.11	36.6	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	13,053	13,053	0.10	0.08	4.36	13,083

Vendor	0.68	0.30	10.6	5.04	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	9,124	9,124	0.33	1.33	2.07	9,531
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.173. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.80	8.87	0.02	0.10	—	0.10	0.09	—	0.09	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.88	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	19.1	18.8	11.9	311	0.00	0.00	131	131	0.00	30.6	30.6	—	113,999	113,999	0.66	0.66	73.4	114,286
Vendor	5.29	2.35	76.0	38.2	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	75,279	75,279	2.77	11.3	32.5	78,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	18.8	18.6	16.2	261	0.00	0.00	131	131	0.00	30.6	30.6	—	108,153	108,153	0.88	0.66	1.90	108,374
Vendor	5.05	2.19	79.6	39.1	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	75,362	75,362	2.77	11.3	0.84	78,787
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.5	13.3	11.6	197	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	78,591	78,591	0.63	0.47	22.7	78,771
Vendor	3.73	1.63	56.8	27.7	0.59	0.59	22.2	22.8	0.59	6.14	6.73	—	53,943	53,943	1.99	8.06	10.0	56,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.46	2.43	2.12	36.0	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	13,012	13,012	0.10	0.08	3.76	13,041
Vendor	0.68	0.30	10.4	5.05	0.11	0.11	4.05	4.16	0.11	1.12	1.23	—	8,931	8,931	0.33	1.33	1.66	9,339
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.175. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.75	8.81	0.02	0.10	—	0.10	0.09	—	0.09	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.87	1.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	18.4	14.1	11.7	302	0.00	0.00	131	131	0.00	30.6	30.6	—	113,411	113,411	0.66	0.44	62.9	113,622
Vendor	4.47	2.35	74.0	37.2	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	73,634	73,634	2.69	11.3	25.9	77,081
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	18.6	14.1	12.1	255	0.00	0.00	131	131	0.00	30.6	30.6	—	107,597	107,597	0.88	0.66	1.63	107,817

Vendor	4.22	2.19	77.6	38.2	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	73,718	73,718	2.69	11.3	0.67	77,140
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	13.0	9.91	8.65	190	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	77,974	77,974	0.63	0.47	19.4	78,149
Vendor	3.13	1.68	55.2	26.9	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	52,621	52,621	1.92	8.04	7.99	55,073
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.37	1.81	1.58	34.7	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	12,909	12,909	0.10	0.08	3.22	12,939
Vendor	0.57	0.31	10.1	4.91	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	8,712	8,712	0.32	1.33	1.32	9,118
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.177. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.72	8.81	0.02	0.10	—	0.10	0.09	—	0.09	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.86	1.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.9	13.7	11.7	292	0.00	0.00	131	131	0.00	30.6	30.6	—	112,889	112,889	0.66	0.44	54.1	113,091
Vendor	4.39	2.43	73.0	36.4	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	72,183	72,183	2.69	10.4	20.9	75,380
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.9	13.4	12.1	246	0.00	0.00	131	131	0.00	30.6	30.6	—	107,103	107,103	0.88	0.66	1.40	107,323
Vendor	4.22	2.19	76.6	37.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	72,269	72,269	2.69	10.4	0.54	75,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.7	9.60	8.50	187	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	77,615	77,615	0.63	0.47	16.7	77,788
Vendor	3.08	1.68	54.5	26.3	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	51,585	51,585	1.92	7.45	6.46	53,860
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.31	1.75	1.55	34.1	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	12,850	12,850	0.10	0.08	2.76	12,879

Vendor	0.56	0.31	9.95	4.80	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	8,540	8,540	0.32	1.23	1.07	8,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.179. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	4.68	8.77	0.02	0.09	—	0.09	0.09	—	0.09	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.85	1.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.5	13.2	11.7	288	0.00	0.00	131	131	0.00	30.6	30.6	—	112,425	112,425	0.66	0.44	46.3	112,620
Vendor	4.39	2.43	72.1	36.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	70,915	70,915	2.69	10.4	17.1	74,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.7	13.4	11.9	241	0.00	0.00	131	131	0.00	30.6	30.6	—	106,667	106,667	0.88	0.66	1.20	106,887
Vendor	4.22	2.27	75.7	37.3	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	71,001	71,001	2.69	10.4	0.44	74,178
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.7	9.60	8.50	183	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	77,298	77,298	0.47	0.47	14.3	77,465
Vendor	3.08	1.68	53.9	26.3	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	50,679	50,679	1.92	7.45	5.27	52,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.31	1.75	1.55	33.4	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	12,798	12,798	0.08	0.08	2.36	12,825
Vendor	0.56	0.31	9.83	4.80	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	8,391	8,391	0.32	1.23	0.87	8,767
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.181. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	4.64	8.76	0.02	0.09	—	0.09	0.08	—	0.08	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.85	1.60	< 0.005	0.02	—	0.02	0.01	—	0.01	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.5	13.2	11.5	283	0.00	0.00	131	131	0.00	30.6	30.6	—	112,032	112,032	0.66	0.44	39.7	112,219
Vendor	4.39	2.43	71.1	35.5	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	69,803	69,803	2.69	10.4	13.9	72,993
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.5	13.0	11.9	241	0.00	0.00	131	131	0.00	30.6	30.6	—	106,294	106,294	0.66	0.66	1.03	106,509

Vendor	4.22	2.27	74.8	36.5	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	69,890	69,890	2.61	10.4	0.36	73,065
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.4	9.31	8.52	180	0.00	0.00	92.5	92.5	0.00	21.7	21.7	—	77,240	77,240	0.47	0.47	12.3	77,405
Vendor	3.08	1.69	53.3	25.7	0.59	0.59	22.2	22.8	0.59	6.14	6.73	—	50,022	50,022	1.93	7.47	4.28	52,301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.26	1.70	1.55	32.9	0.00	0.00	16.9	16.9	0.00	3.95	3.95	—	12,788	12,788	0.08	0.08	2.03	12,815
Vendor	0.56	0.31	9.73	4.69	0.11	0.11	4.05	4.16	0.11	1.12	1.23	—	8,282	8,282	0.32	1.24	0.71	8,659
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.183. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.55	4.59	8.68	0.02	0.09	—	0.09	0.08	—	0.08	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.84	1.58	< 0.005	0.02	—	0.02	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	17.1	12.6	11.5	283	0.00	0.00	131	131	0.00	30.6	30.6	—	111,680	111,680	0.66	0.44	34.0	111,862
Vendor	4.31	2.35	70.2	35.5	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	68,841	68,841	1.79	10.4	11.2	72,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	16.8	12.6	11.9	236	0.00	0.00	131	131	0.00	30.6	30.6	—	105,962	105,962	0.66	0.66	0.88	106,177
Vendor	4.06	2.19	73.8	36.4	0.82	0.82	31.3	32.1	0.82	8.64	9.47	—	68,929	68,929	1.79	10.4	0.29	72,083
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	12.0	8.97	8.34	179	0.00	0.00	92.2	92.2	0.00	21.6	21.6	—	76,789	76,789	0.47	0.47	10.5	76,952
Vendor	3.02	1.62	52.5	25.6	0.59	0.59	22.1	22.7	0.59	6.12	6.71	—	49,199	49,199	1.28	7.45	3.46	51,455
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.20	1.64	1.52	32.7	0.00	0.00	16.8	16.8	0.00	3.94	3.94	—	12,713	12,713	0.08	0.08	1.74	12,740

Vendor	0.55	0.30	9.59	4.67	0.11	0.11	4.04	4.15	0.11	1.12	1.22	—	8,145	8,145	0.21	1.23	0.57	8,519
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.185. Paving (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.88	8.06	10.0	0.01	0.41	—	0.41	0.38	—	0.38	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.45	1.80	< 0.005	0.07	—	0.07	0.07	—	0.07	—	272	272	0.01	< 0.005	—	273
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.1	45.1	< 0.005	< 0.005	—	45.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.04	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	205	205	0.01	0.01	0.02	208
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.20	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	37.5	37.5	< 0.005	< 0.005	0.07	38.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.21	6.21	< 0.005	< 0.005	0.01	6.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.187. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.60	7.18	0.01	0.28	—	0.28	0.26	—	0.26	—	1,083	1,083	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.02	1.31	< 0.005	0.05	—	0.05	0.05	—	0.05	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	1.13	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	212	212	0.01	0.01	0.84	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	0.08	0.96	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	201	201	0.01	0.01	0.02	203
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	146	146	0.01	0.01	0.26	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	24.2	24.2	< 0.005	< 0.005	0.04	24.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.189. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.32	7.13	0.01	0.25	—	0.25	0.23	—	0.23	—	1,080	1,080	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.97	1.30	< 0.005	0.05	—	0.05	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.04	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	207	207	0.01	0.01	0.76	210
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.02	199
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	143	143	0.01	0.01	0.23	144

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.191. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.54	5.08	7.10	0.01	0.23	—	0.23	0.21	—	0.21	—	1,079	1,079	0.04	0.01	—	1,083

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.97	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	203	203	0.01	0.01	0.69	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	193	193	0.01	0.01	0.02	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	0.01	0.01	0.21	142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.193. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.96	7.11	0.01	0.21	—	0.21	0.20	—	0.20	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.91	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	0.01	0.01	0.62	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.02	191
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	< 0.005	0.01	0.19	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.7	22.7	< 0.005	< 0.005	0.03	23.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.195. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.75	7.10	0.01	0.18	—	0.18	0.17	—	0.17	—	1,082	1,082	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	1.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.85	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	196	196	< 0.005	0.01	0.56	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.72	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.01	188
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	< 0.005	0.01	0.17	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.3	22.3	< 0.005	< 0.005	0.03	22.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.197. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	4.61	7.08	0.01	0.17	—	0.17	0.16	—	0.16	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.84	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	192	192	< 0.005	0.01	0.50	195
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.67	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	182	182	< 0.005	0.01	0.01	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.50	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	132	132	< 0.005	0.01	0.15	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.9	21.9	< 0.005	< 0.005	0.03	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.199. Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	6.28	9.90	0.01	0.22	—	0.22	0.20	—	0.20	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.49	7.07	0.01	0.16	—	0.16	0.14	—	0.14	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.82	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.74	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	0.01	0.44	192
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.63	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	180	180	< 0.005	0.01	0.01	182

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	130	130	< 0.005	0.01	0.14	132
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.5	21.5	< 0.005	< 0.005	0.02	21.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.201. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	4.38	7.06	0.01	0.15	—	0.15	0.14	—	0.14	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.80	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.70	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	< 0.005	0.39	187
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.59	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	177	177	< 0.005	0.01	0.01	179
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	0.01	0.12	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.203. Paving (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.61	6.00	9.86	0.01	0.20	—	0.20	0.18	—	0.18	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	4.30	7.06	0.01	0.14	—	0.14	0.13	—	0.13	—	1,082	1,082	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.78	1.29	< 0.005	0.03	—	0.03	0.02	—	0.02	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.65	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	184	184	< 0.005	< 0.005	0.35	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.55	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	174	174	< 0.005	< 0.005	0.01	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	127	127	< 0.005	0.01	0.11	128
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.0	21.0	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.205. Paving (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.91	9.84	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.91	9.84	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.22	7.03	0.01	0.13	—	0.13	0.12	—	0.12	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.77	1.28	< 0.005	0.02	—	0.02	0.02	—	0.02	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.62	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	181	181	< 0.005	< 0.005	0.31	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.52	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	< 0.005	0.01	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	125	125	< 0.005	< 0.005	0.09	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.7	20.7	< 0.005	< 0.005	0.02	20.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.207. Paving (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.58	5.86	9.82	0.01	0.18	—	0.18	0.16	—	0.16	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.58	5.86	9.82	0.01	0.18	—	0.18	0.16	—	0.16	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	4.18	7.02	0.01	0.13	—	0.13	0.12	—	0.12	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.76	1.28	< 0.005	0.02	—	0.02	0.02	—	0.02	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.02	0.58	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	< 0.005	0.27	180
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.49	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.01	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.37	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	123	123	< 0.005	< 0.005	0.08	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.4	20.4	< 0.005	< 0.005	0.01	20.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.209. Paving (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.55	5.73	9.80	0.01	0.15	—	0.15	0.14	—	0.14	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.55	5.73	9.80	0.01	0.15	—	0.15	0.14	—	0.14	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	4.09	7.00	0.01	0.11	—	0.11	0.10	—	0.10	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.75	1.28	< 0.005	0.02	—	0.02	0.02	—	0.02	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.56	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	177	177	< 0.005	< 0.005	0.23	178
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.01	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.35	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.07	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.2	20.2	< 0.005	< 0.005	0.01	20.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.211. Paving (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	5.62	9.78	0.01	0.14	—	0.14	0.13	—	0.13	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	5.62	9.78	0.01	0.14	—	0.14	0.13	—	0.13	—	1,511	1,511	0.06	0.01	—	1,516

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.38	4.03	7.01	0.01	0.10	—	0.10	0.09	—	0.09	—	1,082	1,082	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.73	1.28	< 0.005	0.02	—	0.02	0.02	—	0.02	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.53	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	176	176	< 0.005	< 0.005	0.20	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	167	167	< 0.005	< 0.005	0.01	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.06	122

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.01	20.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.213. Paving (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	5.50	9.77	0.01	0.12	—	0.12	0.11	—	0.11	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	5.50	9.77	0.01	0.12	—	0.12	0.11	—	0.11	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.93	6.98	0.01	0.09	—	0.09	0.08	—	0.08	—	1,079	1,079	0.04	0.01	—	1,083

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.72	1.27	< 0.005	0.02	—	0.02	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.51	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	174	174	< 0.005	< 0.005	0.17	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	165	165	< 0.005	< 0.005	< 0.005	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.05	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.9	19.9	< 0.005	< 0.005	0.01	19.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.215. Paving (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	5.38	9.76	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.50	5.38	9.76	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.36	3.84	6.97	0.01	0.08	—	0.08	0.07	—	0.07	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.70	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179

Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.49	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	< 0.005	0.15	174
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.41	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	164	164	< 0.005	< 0.005	< 0.005	165
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.31	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.05	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.7	19.7	< 0.005	< 0.005	0.01	19.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.217. Paving (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	3.79	6.97	0.01	0.08	—	0.08	0.07	—	0.07	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.69	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.48	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	172	172	< 0.005	< 0.005	0.13	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	163	163	< 0.005	< 0.005	< 0.005	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.04	119
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.6	19.6	< 0.005	< 0.005	0.01	19.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.219. Paving (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.58	0.49	5.27	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.27	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.35	3.78	6.98	0.01	0.08	—	0.08	0.07	—	0.07	—	1,082	1,082	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.69	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.47	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	171	171	< 0.005	< 0.005	0.11	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.39	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	162	162	< 0.005	< 0.005	< 0.005	163
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	0.03	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.5	19.5	< 0.005	< 0.005	0.01	19.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.221. Paving (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	5.20	9.74	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.48	5.20	9.74	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.34	3.72	6.96	0.01	0.07	—	0.07	0.07	—	0.07	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.68	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.45	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.09	171
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.38	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	162	162	< 0.005	< 0.005	< 0.005	162

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.29	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.03	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.4	19.4	< 0.005	< 0.005	< 0.005	19.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.223. Paving (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	5.16	9.73	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	5.16	9.73	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	3.68	6.95	0.01	0.07	—	0.07	0.06	—	0.06	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.67	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.44	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	170	170	< 0.005	< 0.005	0.08	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.37	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	161	161	< 0.005	< 0.005	< 0.005	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.28	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.03	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.3	19.3	< 0.005	< 0.005	< 0.005	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.225. Paving (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	5.12	9.72	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	5.12	9.72	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.33	3.66	6.95	0.01	0.06	—	0.06	0.06	—	0.06	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.67	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	169	169	< 0.005	< 0.005	0.07	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	160	160	< 0.005	< 0.005	< 0.005	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.2	19.2	< 0.005	< 0.005	< 0.005	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.227. Paving (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	5.11	9.72	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	5.11	9.72	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.33	3.66	6.96	0.01	0.06	—	0.06	0.06	—	0.06	—	1,082	1,082	0.04	0.01	—	1,086
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.67	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	180
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.43	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.06	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.36	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	160	160	< 0.005	< 0.005	< 0.005	160
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.2	19.2	< 0.005	< 0.005	< 0.005	19.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.229. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.62	6.94	0.01	0.05	—	0.05	0.05	—	0.05	—	1,079	1,079	0.04	0.01	—	1,083
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.66	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	179
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.02	0.42	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	168	168	< 0.005	< 0.005	0.05	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.35	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	159	159	< 0.005	< 0.005	< 0.005	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.27	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.02	116
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	19.1	19.1	< 0.005	< 0.005	< 0.005	19.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.231. Architectural Coating (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.18	0.15	0.93	1.15	< 0.005	0.04	—	0.04	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Architectural Coatings	—	9.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.98	3.98	< 0.005	< 0.005	—	3.99
Architectural Coatings	—	1.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	11.1	9.27	12.2	139	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	27,333	27,333	1.26	0.99	3.17	27,663
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.99	1.66	2.19	26.2	0.00	0.00	4.65	4.65	0.00	1.09	1.09	—	4,994	4,994	0.23	0.18	9.50	5,063
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.30	0.40	4.77	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	827	827	0.04	0.03	1.57	838
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.233. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.65	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.96	8.96	9.56	151	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	28,211	28,211	1.17	0.95	111	28,634
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.87	8.83	11.3	127	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	26,737	26,737	1.21	0.99	2.89	27,065
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.04	6.29	8.08	96.0	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	19,435	19,435	0.87	0.71	34.4	19,702
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.28	1.15	1.47	17.5	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	3,218	3,218	0.14	0.12	5.69	3,262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.235. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.63	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.56	8.57	8.66	139	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	27,626	27,626	1.17	0.95	101	28,038
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	9.47	8.48	9.60	118	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	26,186	26,186	1.21	0.99	2.62	26,514
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.73	6.03	7.41	88.4	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	18,981	18,981	0.87	0.68	31.2	19,236
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.23	1.10	1.35	16.1	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	3,143	3,143	0.14	0.11	5.17	3,185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.237. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.61	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.30	7.36	7.75	129	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	27,070	27,070	1.12	0.95	91.6	27,472
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.30	7.31	8.70	110	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	25,663	25,663	1.17	0.95	2.38	25,977
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.90	5.19	6.76	82.3	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	18,601	18,601	0.83	0.68	28.3	18,852
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.08	0.95	1.23	15.0	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	3,080	3,080	0.14	0.11	4.69	3,121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.239. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.59	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.04	7.09	6.89	120	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	26,552	26,552	1.12	0.95	82.7	26,945
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.95	6.96	8.61	102	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	25,173	25,173	0.35	0.95	2.14	25,466
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.68	4.97	6.15	76.3	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	18,246	18,246	0.25	0.68	25.5	18,479
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.04	0.91	1.12	13.9	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	3,021	3,021	0.04	0.11	4.22	3,059
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.241. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.58	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.77	6.83	6.81	113	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	26,077	26,077	0.26	0.95	74.3	26,440
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.73	6.78	7.75	95.8	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	24,724	24,724	0.31	0.95	1.92	25,016
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.83	5.52	71.8	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	17,970	17,970	0.22	0.68	23.0	18,201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	1.01	13.1	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,975	2,975	0.04	0.11	3.81	3,013
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.243. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.57	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.51	6.56	5.95	105	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	25,633	25,633	0.26	0.95	66.5	25,988
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.61	6.48	6.85	89.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	24,306	24,306	0.31	0.95	1.72	24,598
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	4.59	4.89	66.9	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	17,617	17,617	0.22	0.68	20.6	17,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.84	0.89	12.2	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,917	2,917	0.04	0.11	3.40	2,954
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.245. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.56	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.43	6.30	5.09	99.0	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	25,217	25,217	0.26	0.95	59.2	25,565
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.34	6.21	5.99	83.4	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,914	23,914	0.26	0.95	1.54	24,204
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.50	4.40	4.28	62.8	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	17,332	17,332	0.19	0.68	18.2	17,557
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.80	0.78	11.5	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,870	2,870	0.03	0.11	3.02	2,907
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.247. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.12	5.18	5.04	92.6	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	24,835	24,835	0.22	0.13	52.6	24,932
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.03	5.13	5.95	78.5	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,554	23,554	0.26	0.95	1.36	23,844
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.34	3.67	4.22	58.7	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	17,071	17,071	0.19	0.68	16.2	17,294
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.67	0.77	10.7	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,826	2,826	0.03	0.11	2.69	2,863
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.249. Architectural Coating (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.77	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.6	95.6	< 0.005	< 0.005	—	95.9
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.86	4.96	4.18	87.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	24,499	24,499	0.22	0.13	46.4	24,590
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.81	4.91	5.09	73.7	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,236	23,236	0.26	0.13	1.20	23,284
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	3.49	3.61	55.4	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	16,886	16,886	0.19	0.68	14.4	17,108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.66	10.1	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,796	2,796	0.03	0.11	2.38	2,832
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.251. Architectural Coating (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.79	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.68	4.78	4.14	82.5	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	24,174	24,174	0.22	0.13	40.8	24,260
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.59	4.69	4.23	69.8	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,930	22,930	0.22	0.13	1.06	22,976
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.35	3.60	52.5	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	16,618	16,618	0.16	0.09	12.6	16,663
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.61	0.66	9.58	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,751	2,751	0.03	0.02	2.08	2,759
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.253. Architectural Coating (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.54	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.65	4.56	3.28	77.9	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,890	23,890	0.22	0.13	35.5	23,971
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.60	4.51	4.18	65.9	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,661	22,661	0.22	0.13	0.92	22,707
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.26	3.19	2.99	49.1	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	16,423	16,423	0.16	0.09	11.0	16,466
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.58	0.55	8.97	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,719	2,719	0.03	0.02	1.82	2,726
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.255. Architectural Coating (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.54	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.51	4.43	3.28	74.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,639	23,639	0.18	0.13	30.9	23,713
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.47	4.38	4.18	62.9	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,424	22,424	0.22	0.13	0.80	22,469
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.19	3.13	2.96	47.0	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	16,251	16,251	0.16	0.09	9.49	16,293
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.57	0.54	8.58	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,691	2,691	0.03	0.02	1.57	2,697
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.257. Architectural Coating (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.10	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.10	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.54	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.43	4.34	3.24	70.5	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,432	23,432	0.18	0.13	26.8	23,503
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.43	4.34	3.33	60.0	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,229	22,229	0.22	0.13	0.69	22,275
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	3.08	2.38	45.1	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	16,153	16,153	0.16	0.09	8.28	16,194
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.56	0.43	8.22	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,674	2,674	0.03	0.02	1.37	2,681
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.259. Architectural Coating (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.24	67.8	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,234	23,234	0.18	0.13	23.1	23,300
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.21	3.28	57.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,041	22,041	0.18	0.13	0.60	22,085
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.04	2.97	2.34	42.9	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,973	15,973	0.13	0.09	7.13	16,011
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.54	0.43	7.83	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,645	2,645	0.02	0.02	1.18	2,651
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.261. Architectural Coating (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.03	3.19	65.9	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	23,090	23,090	0.18	0.13	19.9	23,154
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.07	3.28	55.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,904	21,904	0.18	0.13	0.52	21,949
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.94	2.88	2.34	41.5	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,874	15,874	0.13	0.09	6.13	15,912
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.43	7.58	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,628	2,628	0.02	0.02	1.02	2,634
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.263. Architectural Coating (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.99	3.94	2.38	64.0	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,936	22,936	0.18	0.13	17.1	22,997
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.99	3.94	3.28	53.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,758	21,758	0.18	0.13	0.44	21,803
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.78	2.31	40.1	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,768	15,768	0.13	0.09	5.27	15,804
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.51	0.42	7.32	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,611	2,611	0.02	0.02	0.87	2,617
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.265. Architectural Coating (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.77	2.38	62.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,800	22,800	0.13	0.13	14.7	22,857
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.77	3.72	3.24	52.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,631	21,631	0.18	0.13	0.38	21,675
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.70	2.67	2.32	39.5	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	15,718	15,718	0.13	0.09	4.54	15,754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.49	0.42	7.20	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,602	2,602	0.02	0.02	0.75	2,608
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.267. Architectural Coating (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.68	2.82	2.33	60.3	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,682	22,682	0.13	0.09	12.6	22,724
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.72	2.82	2.42	51.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,519	21,519	0.18	0.13	0.33	21,563
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.60	1.98	1.73	38.0	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,595	15,595	0.13	0.09	3.89	15,630
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.36	0.32	6.94	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,582	2,582	0.02	0.02	0.64	2,588
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.269. Architectural Coating (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.59	2.73	2.33	58.5	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,578	22,578	0.13	0.09	10.8	22,618
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.59	2.69	2.42	49.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,421	21,421	0.18	0.13	0.28	21,465
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	1.92	1.70	37.3	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,523	15,523	0.13	0.09	3.34	15,558
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.35	0.31	6.81	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,570	2,570	0.02	0.02	0.55	2,576
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.271. Architectural Coating (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.50	2.64	2.33	57.5	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,485	22,485	0.13	0.09	9.25	22,524
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.55	2.69	2.38	48.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,333	21,333	0.18	0.13	0.24	21,377
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	1.92	1.70	36.6	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,460	15,460	0.09	0.09	2.86	15,493
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.35	0.31	6.68	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,560	2,560	0.02	0.02	0.47	2,565
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.273. Architectural Coating (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	—	36.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	—	6.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.50	2.64	2.29	56.6	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,406	22,406	0.13	0.09	7.94	22,444
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.50	2.60	2.38	48.1	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,259	21,259	0.13	0.13	0.21	21,302
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	1.86	1.70	36.0	0.00	0.00	18.5	18.5	0.00	4.33	4.33	—	15,448	15,448	0.09	0.09	2.45	15,481
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.34	0.31	6.58	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,558	2,558	0.02	0.02	0.41	2,563
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.275. Architectural Coating (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	51.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	—	36.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	—	6.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.41	2.51	2.29	56.6	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	22,336	22,336	0.13	0.09	6.81	22,372
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.37	2.51	2.38	47.2	0.00	0.00	26.1	26.1	0.00	6.12	6.12	—	21,192	21,192	0.13	0.13	0.18	21,235
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.41	1.79	1.67	35.9	0.00	0.00	18.4	18.4	0.00	4.32	4.32	—	15,358	15,358	0.09	0.09	2.10	15,390
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.33	0.30	6.55	0.00	0.00	3.37	3.37	0.00	0.79	0.79	—	2,543	2,543	0.02	0.02	0.35	2,548
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	73,070	73,070	9.25	1.12	—	73,635
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	17,118	17,118	2.17	0.26	—	17,250

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.04	0.01	—	345
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	41,201	41,201	5.21	0.63	—	41,519
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	52,689	52,689	6.67	0.81	—	53,097
Total	—	—	—	—	—	—	—	—	—	—	—	—	184,420	184,420	23.3	2.83	—	185,846
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	73,070	73,070	9.25	1.12	—	73,635
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	17,118	17,118	2.17	0.26	—	17,250
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	343	343	0.04	0.01	—	345
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	41,201	41,201	5.21	0.63	—	41,519
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	52,689	52,689	6.67	0.81	—	53,097
Total	—	—	—	—	—	—	—	—	—	—	—	—	184,420	184,420	23.3	2.83	—	185,846
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	12,098	12,098	1.53	0.19	—	12,191
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	2,834	2,834	0.36	0.04	—	2,856
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	56.7	56.7	0.01	< 0.005	—	57.2

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	6,821	6,821	0.86	0.10	—	6,874
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	8,723	8,723	1.10	0.13	—	8,791
Total	—	—	—	—	—	—	—	—	—	—	—	—	30,533	30,533	3.86	0.47	—	30,769

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	16.8	8.40	144	61.1	0.92	11.6	—	11.6	11.6	—	11.6	—	182,225	182,225	16.1	0.34	—	182,730
Strip Mall	0.43	0.22	3.92	3.30	0.02	0.30	—	0.30	0.30	—	0.30	—	4,680	4,680	0.41	0.01	—	4,693
General Light Industry	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	686	686	0.06	< 0.005	—	688
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	7.60	3.80	69.1	58.1	0.41	5.25	—	5.25	5.25	—	5.25	—	82,459	82,459	7.30	0.16	—	82,688
General Office Building	3.10	1.55	28.2	23.7	0.17	2.14	—	2.14	2.14	—	2.14	—	33,615	33,615	2.97	0.06	—	33,709
Total	28.0	14.0	245	147	1.53	19.3	—	19.3	19.3	—	19.3	—	303,665	303,665	26.9	0.57	—	304,508
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	16.8	8.40	144	61.1	0.92	11.6	—	11.6	11.6	—	11.6	—	182,225	182,225	16.1	0.34	—	182,730

Strip Mall	0.43	0.22	3.92	3.30	0.02	0.30	—	0.30	0.30	—	0.30	—	4,680	4,680	0.41	0.01	—	4,693
General Light Industry	0.06	0.03	0.57	0.48	< 0.005	0.04	—	0.04	0.04	—	0.04	—	686	686	0.06	< 0.005	—	688
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	7.60	3.80	69.1	58.1	0.41	5.25	—	5.25	5.25	—	5.25	—	82,459	82,459	7.30	0.16	—	82,688
General Office Building	3.10	1.55	28.2	23.7	0.17	2.14	—	2.14	2.14	—	2.14	—	33,615	33,615	2.97	0.06	—	33,709
Total	28.0	14.0	245	147	1.53	19.3	—	19.3	19.3	—	19.3	—	303,665	303,665	26.9	0.57	—	304,508
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	3.07	1.53	26.2	11.1	0.17	2.12	—	2.12	2.12	—	2.12	—	30,169	30,169	2.67	0.06	—	30,253
Strip Mall	0.08	0.04	0.72	0.60	< 0.005	0.05	—	0.05	0.05	—	0.05	—	775	775	0.07	< 0.005	—	777
General Light Industry	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	114	114	0.01	< 0.005	—	114
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	1.39	0.69	12.6	10.6	0.08	0.96	—	0.96	0.96	—	0.96	—	13,652	13,652	1.21	0.03	—	13,690
General Office Building	0.57	0.28	5.14	4.32	0.03	0.39	—	0.39	0.39	—	0.39	—	5,565	5,565	0.49	0.01	—	5,581
Total	5.11	2.55	44.8	26.8	0.28	3.53	—	3.53	3.53	—	3.53	—	50,275	50,275	4.45	0.09	—	50,415

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	889	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	81.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	175	163	12.4	1,395	0.07	1.02	—	1.02	1.35	—	1.35	—	4,510	4,510	0.19	0.04	—	4,526
Total	175	1,135	12.4	1,395	0.07	1.02	—	1.02	1.35	—	1.35	0.00	4,510	4,510	0.19	0.04	—	4,526
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	889	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	81.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	971	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	162	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	14.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	21.9	20.4	1.55	174	0.01	0.13	—	0.13	0.17	—	0.17	—	511	511	0.02	< 0.005	—	513
Total	21.9	198	1.55	174	0.01	0.13	—	0.13	0.17	—	0.17	0.00	511	511	0.02	< 0.005	—	513

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1,059	13,980	15,039	110	2.80	—	18,632
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	346	879	1,225	35.6	0.86	—	2,371
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	22.2	56.2	78.4	2.28	0.05	—	152
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	360	915	1,275	37.1	0.89	—	2,468
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,409	3,577	4,987	145	3.49	—	9,650
Total	—	—	—	—	—	—	—	—	—	—	—	3,198	19,407	22,605	330	8.09	—	33,273
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1,059	13,980	15,039	110	2.80	—	18,632
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	346	879	1,225	35.6	0.86	—	2,371

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	22.2	56.2	78.4	2.28	0.05	—	152
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	360	915	1,275	37.1	0.89	—	2,468
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,409	3,577	4,987	145	3.49	—	9,650
Total	—	—	—	—	—	—	—	—	—	—	—	3,198	19,407	22,605	330	8.09	—	33,273
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	175	2,315	2,490	18.3	0.46	—	3,085
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	57.3	146	203	5.90	0.14	—	393
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	3.67	9.31	13.0	0.38	0.01	—	25.1
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	59.7	151	211	6.14	0.15	—	409
General Office Building	—	—	—	—	—	—	—	—	—	—	—	233	592	826	24.0	0.58	—	1,598
Total	—	—	—	—	—	—	—	—	—	—	—	529	3,213	3,742	54.7	1.34	—	5,509

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6,277	0.00	6,277	627	0.00	—	21,961
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,380	0.00	1,380	138	0.00	—	4,830
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
City Park	—	—	—	—	—	—	—	—	—	—	—	0.60	0.00	0.60	0.06	0.00	—	2.11
Library	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,438
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2,074	0.00	2,074	207	0.00	—	7,257
Total	—	—	—	—	—	—	—	—	—	—	—	12,749	0.00	12,749	1,274	0.00	—	44,605
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6,277	0.00	6,277	627	0.00	—	21,961
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,380	0.00	1,380	138	0.00	—	4,830
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	33.4	0.00	33.4	3.34	0.00	—	117
City Park	—	—	—	—	—	—	—	—	—	—	—	0.60	0.00	0.60	0.06	0.00	—	2.11
Library	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,438
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2,074	0.00	2,074	207	0.00	—	7,257
Total	—	—	—	—	—	—	—	—	—	—	—	12,749	0.00	12,749	1,274	0.00	—	44,605
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1,039	0.00	1,039	104	0.00	—	3,636
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	229	0.00	229	22.8	0.00	—	800
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	5.53	0.00	5.53	0.55	0.00	—	19.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.10	0.00	0.10	0.01	0.00	—	0.35
Library	—	—	—	—	—	—	—	—	—	—	—	494	0.00	494	49.4	0.00	—	1,728
General Office Building	—	—	—	—	—	—	—	—	—	—	—	343	0.00	343	34.3	0.00	—	1,201
Total	—	—	—	—	—	—	—	—	—	—	—	2,111	0.00	2,111	211	0.00	—	7,385

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	207	207
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.2	15.2
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.2	23.2

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.1	10.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	269	269
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	207	207
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.2	15.2
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.0	13.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23.2	23.2
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.1	10.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	269	269
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34.3	34.3
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.52	2.52
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.15	2.15
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.84	3.84
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.67	1.67

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44.5	44.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/1/2023	12/31/2045	5.00	5,805	—
Site Preparation	Site Preparation	10/1/2023	12/31/2045	5.00	5,805	—
Grading	Grading	10/1/2023	12/31/2045	5.00	5,805	—
Building Construction	Building Construction	10/1/2023	12/31/2045	5.00	5,805	—
Paving	Paving	10/1/2023	12/31/2045	5.00	5,805	—
Architectural Coating	Architectural Coating	10/1/2023	12/31/2045	5.00	5,805	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT

Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	9,990	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	3,657	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,998	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	58,567,860	19,522,620	18,958,260	6,319,420	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Paving	0.00	0.00	0.00	0.00	163

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	163	0%
Strip Mall	0.00	0%
General Light Industry	0.00	0%
City Park	0.00	0%
Library	0.00	0%
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	349	0.03	< 0.005

2024	0.00	349	0.03	< 0.005
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005
2027	0.00	346	0.03	< 0.005
2028	0.00	346	0.03	< 0.005
2029	0.00	346	0.03	< 0.005
2030	0.00	261	0.03	< 0.005
2031	0.00	261	0.03	< 0.005
2032	0.00	261	0.03	< 0.005
2033	0.00	261	0.03	< 0.005
2034	0.00	261	0.03	< 0.005
2035	0.00	261	0.03	< 0.005
2036	0.00	261	0.03	< 0.005
2037	0.00	261	0.03	< 0.005
2038	0.00	261	0.03	< 0.005
2039	0.00	261	0.03	< 0.005
2040	0.00	261	0.03	< 0.005
2041	0.00	261	0.03	< 0.005
2042	0.00	261	0.03	< 0.005
2043	0.00	261	0.03	< 0.005
2044	0.00	261	0.03	< 0.005
2045	0.00	261	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Total all Land Uses	155,019	155,019	155,019	56,581,935	1,026,827	1,026,827	1,026,827	374,791,855

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
58567860	19,522,620	18,958,260	6,319,420	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	102,268,792	261	0.0330	0.0040	568,589,855
Strip Mall	23,957,848	261	0.0330	0.0040	14,604,312
General Light Industry	479,637	261	0.0330	0.0040	2,140,097
City Park	0.00	261	0.0330	0.0040	0.00
Library	57,664,622	261	0.0330	0.0040	257,294,455
General Office Building	73,743,909	261	0.0330	0.0040	104,888,752

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	552,845,002	2,977,849,225
Strip Mall	180,689,546	0.00
General Light Industry	11,562,500	0.00
City Park	0.00	0.00
Library	188,086,389	0.00
General Office Building	735,497,796	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	11,647	—
Strip Mall	2,561	—
General Light Industry	62.0	—
City Park	1.12	—
Library	5,536	—
General Office Building	3,849	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Library	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Library	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Library	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	5.38	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	29.9
AQ-PM	79.9
AQ-DPM	83.9
Drinking Water	38.2
Lead Risk Housing	83.3

Pesticides	26.9
Toxic Releases	95.3
Traffic	95.3
Effect Indicators	—
CleanUp Sites	40.8
Groundwater	91.3
Haz Waste Facilities/Generators	83.1
Impaired Water Bodies	0.00
Solid Waste	84.7
Sensitive Population	—
Asthma	71.4
Cardio-vascular	62.6
Low Birth Weights	38.7
Socioeconomic Factor Indicators	—
Education	83.1
Housing	61.5
Linguistic	71.9
Poverty	80.8
Unemployment	18.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	22.05825741
Employed	70.02438085
Median HI	31.25882202

Education	—
Bachelor's or higher	26.78044399
High school enrollment	4.863338894
Preschool enrollment	33.99204414
Transportation	—
Auto Access	47.37585012
Active commuting	79.09662518
Social	—
2-parent households	31.36147825
Voting	29.74464263
Neighborhood	—
Alcohol availability	13.8842551
Park access	18.0803285
Retail density	46.7855768
Supermarket access	94.25125112
Tree canopy	41.57577313
Housing	—
Homeownership	28.19196715
Housing habitability	22.13524958
Low-inc homeowner severe housing cost burden	34.51815732
Low-inc renter severe housing cost burden	25.88220198
Uncrowded housing	31.48979854
Health Outcomes	—
Insured adults	22.41755422
Arthritis	0.0
Asthma ER Admissions	28.0
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	34.9
Cognitively Disabled	82.5
Physically Disabled	50.9
Heart Attack ER Admissions	38.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	84.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	39.2
Elderly	67.6
English Speaking	22.6
Foreign-born	73.7
Outdoor Workers	65.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	7.6
Traffic Density	92.4
Traffic Access	87.4
Other Indices	—
Hardship	64.8
Other Decision Support	—
2016 Voting	29.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	87.0
Healthy Places Index Score for Project Location (b)	26.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses and sizes selected from Table 3-2 and Table 3-3 of the EIR Project Description. Land use subtypes selected for simplicity. Based on average land use acreage, assumes approximately 18 units per acre for residential.
Construction: Construction Phases	Construction schedule assumed to occur throughout Project buildout period (for simplicity) and a conservative estimate.
Operations: Hearths	No hearths or fireplaces.
Construction: Dust From Material Movement	Site is relatively flat; soil is anticipated to balance on-site.
Construction: Demolition	No demolition for the purposes of modeling.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: 2023, 2045
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	**MPG (Derived)**		**Fleet %**	
Los Angeles	2023	All Other Buses	Aggregate	Aggregate	Diesel	1505.950446	84397.24646	9.155133886	**9.22**		**0.0311%**	
Los Angeles	2023	LDA	Aggregate	Aggregate	Gasoline	3441156.829	137073184.4	4822.80171	**28.42**		**50.4963%**	
Los Angeles	2023	LDA	Aggregate	Aggregate	Diesel	9775.319042	293630.7483	7.379568678	**39.79**		**0.1082%**	
Los Angeles	2023	LDT1	Aggregate	Aggregate	Gasoline	323318.13	11785009.61	496.1919658	**23.75**		**4.3415%**	
Los Angeles	2023	LDT1	Aggregate	Aggregate	Diesel	135.0073317	2742.331596	0.119110541	**23.02**		**0.0010%**	
Los Angeles	2023	LDT2	Aggregate	Aggregate	Gasoline	1558892.967	64432893.96	2789.861614	**23.10**		**23.7364%**	
Los Angeles	2023	LDT2	Aggregate	Aggregate	Diesel	4736.11341	207450.1233	6.743871515	**30.76**		**0.0764%**	
Los Angeles	2023	LHD1	Aggregate	Aggregate	Gasoline	126299.2037	4975895.69	379.0055875	**13.13**		**1.8331%**	
Los Angeles	2023	LHD1	Aggregate	Aggregate	Diesel	54739.29564	2400705.674	118.3713315	**20.28**		**0.8844%**	
Los Angeles	2023	LHD2	Aggregate	Aggregate	Gasoline	19347.35824	720925.6056	62.65613706	**11.51**		**0.2656%**	
Los Angeles	2023	LHD2	Aggregate	Aggregate	Diesel	24418.54186	1058011.592	62.0901808	**17.04**		**0.3898%**	
Los Angeles	2023	MCY	Aggregate	Aggregate	Gasoline	147383.6235	966253.256	23.58957721	**40.96**		**0.3560%**	
Los Angeles	2023	MDV	Aggregate	Aggregate	Gasoline	951501.414	36274737.14	1927.776242	**18.82**		**13.3632%**	
Los Angeles	2023	MDV	Aggregate	Aggregate	Diesel	10934.58248	433864.9185	18.77610629	**23.11**		**0.1598%**	
Los Angeles	2023	MH	Aggregate	Aggregate	Gasoline	16465.34174	159232.4431	32.88431993	**4.84**		**0.0587%**	
Los Angeles	2023	MH	Aggregate	Aggregate	Diesel	5471.272509	56805.35552	5.693791756	**9.98**		**0.0209%**	
Los Angeles	2023	Motor Coach	Aggregate	Aggregate	Diesel	601.3027629	85670.04743	15.57166377	**5.50**		**0.0316%**	
Los Angeles	2023	OBUS	Aggregate	Aggregate	Gasoline	3862.469799	157361.0818	31.49812866	**5.00**		**0.0580%**	
Los Angeles	2023	PTO	Aggregate	Aggregate	Diesel	0	109722.1336	22.42583195	**4.89**		**0.0404%**	
Los Angeles	2023	SBUS	Aggregate	Aggregate	Gasoline	1386.182068	64113.69131	7.169865984	**8.94**		**0.0236%**	
Los Angeles	2023	SBUS	Aggregate	Aggregate	Diesel	2009.952824	41462.26059	5.643690961	**7.35**		**0.0153%**	
Los Angeles	2023	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	33.2648875	2235.064643	0.24407405	**9.16**		**0.0008%**	
Los Angeles	2023	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	44.63145468	3066.423389	0.334409735	**9.17**		**0.0011%**	
Los Angeles	2023	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	140.957309	8007.686239	0.860823619	**9.30**		**0.0029%**	
Los Angeles	2023	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	243.048554	50222.31824	5.08076527	**9.88**	**MHD**	**0.0185%**	
Los Angeles	2023	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	3843.555772	129993.1958	14.71647452	**8.83**	**7.51494071**	**0.0479%**	
Los Angeles	2023	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	3870.02439	134091.1708	15.26114824	**8.79**		**0.0494%**	
Los Angeles	2023	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	11896.57491	409689.0258	46.42930572	**8.82**		**0.1509%**	
Los Angeles	2023	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	2972.849583	164197.6206	18.13781815	**9.05**		**0.0605%**	
Los Angeles	2023	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	4920.940526	203186.1586	23.01738018	**8.83**		**0.0749%**	
Los Angeles	2023	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	10645.8247	467755.2569	53.15437261	**8.80**		**0.1723%**	
Los Angeles	2023	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	9674.244554	416504.654	47.21298595	**8.82**		**0.1534%**	
Los Angeles	2023	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	4288.870958	209237.3295	23.33212444	**8.97**		**0.0771%**	
Los Angeles	2023	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	130.1628238	6827.874069	0.764652434	**8.93**		**0.0025%**	
Los Angeles	2023	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	1650.915321	101480.358	10.70753633	**9.48**		**0.0374%**	
Los Angeles	2023	T6 OOS Class 4	Aggregate	Aggregate	Diesel	19.172258	1276.818624	0.139375601	**9.16**		**0.0005%**	
Los Angeles	2023	T6 OOS Class 5	Aggregate	Aggregate	Diesel	25.61452569	1751.56555	0.190957448	**9.17**		**0.0006%**	
Los Angeles	2023	T6 OOS Class 6	Aggregate	Aggregate	Diesel	81.15840226	4576.890895	0.491657446	**9.31**		**0.0017%**	
Los Angeles	2023	T6 OOS Class 7	Aggregate	Aggregate	Diesel	131.7857191	33279.68812	3.348042719	**9.94**		**0.0123%**	
Los Angeles	2023	T6 Public Class 4	Aggregate	Aggregate	Diesel	720.988197	25366.36132	2.987748213	**8.49**		**0.0093%**	
Los Angeles	2023	T6 Public Class 5	Aggregate	Aggregate	Diesel	498.1383212	17525.40276	2.093776652	**8.37**		**0.0065%**	
Los Angeles	2023	T6 Public Class 6	Aggregate	Aggregate	Diesel	633.4608428	21315.87713	2.567543933	**8.30**		**0.0079%**	
Los Angeles	2023	T6 Public Class 7	Aggregate	Aggregate	Diesel	2700.669346	117329.8212	13.80025804	**8.50**		**0.0432%**	
Los Angeles	2023	T6 Utility Class 5	Aggregate	Aggregate	Diesel	643.0066581	26138.45408	2.825095215	**9.25**		**0.0096%**	
Los Angeles	2023	T6 Utility Class 6	Aggregate	Aggregate	Diesel	121.6714726	4911.193985	0.528541738	**9.29**		**0.0018%**	
Los Angeles	2023	T6 Utility Class 7	Aggregate	Aggregate	Diesel	138.7667106	6819.896527	0.731921941	**9.32**		**0.0025%**	
Los Angeles	2023	T6TS	Aggregate	Aggregate	Gasoline	15250.38261	833770.3377	163.5473006	**5.10**		**0.3072%**	
Los Angeles	2023	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	6812.078931	1401176.977	228.6736058	**6.13**		**0.5162%**	
Los Angeles	2023	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	6110.807661	1664646.807	268.8680738	**6.19**	**HHD**	**0.6132%**	
Los Angeles	2023	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	2558.493278	604451.0587	98.82704788	**6.12**	**5.99266222**	**0.2227%**	
Los Angeles	2023	T7 POAK Class 8	Aggregate	Aggregate	Diesel	1.163143668	108.5424559	0.019311768	**5.62**		**0.0000%**	
Los Angeles	2023	T7 POLA Class 8	Aggregate	Aggregate	Diesel	8353.750169	1090048.692	182.0243764	**5.99**		**0.4016%**	
Los Angeles	2023	T7 Public Class 8	Aggregate	Aggregate	Diesel	3771.88094	150942.5829	26.51866951	**5.69**		**0.0556%**	
Los Angeles	2023	T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	733.4109344	50716.7385	8.437501351	**6.01**		**0.0187%**	
Los Angeles	2023	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	2062.500591	122329.8296	20.41095393	**5.99**		**0.0451%**	
Los Angeles	2023	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	5919.760794	341681.5497	56.78331323	**6.02**		**0.1259%**	
Los Angeles	2023	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	1307.448091	84817.85152	32.57189689	**2.60**		**0.0312%**	
Los Angeles	2023	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	13663.14728	1094114.733	178.8678766	**6.12**		**0.4031%**	
Los Angeles	2023	T7 Utility Class 8	Aggregate	Aggregate	Diesel	451.6625508	20758.59889	3.369655662	**6.16**		**0.0076%**	
Los Angeles	2023	T7IS	Aggregate	Aggregate	Gasoline	52.46530595	3245.073125	0.820390033	**3.96**		**0.0012%**	
Los Angeles	2023	UBUS	Aggregate	Aggregate	Gasoline	438.7257597	31153.4128	6.805144169	**4.58**		**0.0115%**	
Los Angeles	2023	UBUS	Aggregate	Aggregate	Diesel	45.07026392	7197.0263	1.176578383	**6.12**		**0.0012%**	
Los Angeles	2045	All Other Buses	Aggregate	Aggregate	Diesel	1599.548201	80079.87421	7.729014499	**10.36**		**0.0316%**	2045
Los Angeles	2045	LDA	Aggregate	Aggregate	Gasoline	2877156.649	109669134.9	3048.383478	**35.98**		**43.2174%**	
Los Angeles	2045	LDA	Aggregate	Aggregate	Diesel	1842.517772	65033.08764	1.228991246	**52.92**		**0.0256%**	
Los Angeles	2045	LDT1	Aggregate	Aggregate	Gasoline	263419.0867	9470021.419	307.3785162	**30.81**		**3.7319%**	
Los Angeles	2045	LDT1	Aggregate	Aggregate	Diesel	2.902544209	108.8734171	0.003829671	**28.43**		**0.0000%**	
Los Angeles	2045	LDT2	Aggregate	Aggregate	Gasoline	1935695.493	73019936.25	2442.675658	**29.89**		**28.7750%**	
Los Angeles	2045	LDT2	Aggregate	Aggregate	Diesel	7322.931406	278053.8969	7.246148186	**38.37**		**0.1096%**	
Los Angeles	2045	LHD1	Aggregate	Aggregate	Gasoline	88602.02066	3083865.928	187.7777805	**16.42**		**1.2153%**	
Los Angeles	2045	LHD1	Aggregate	Aggregate	Diesel	66801.43374	2284915.449	106.1640116	**21.52**		**0.9004%**	
Los Angeles	2045	LHD2	Aggregate	Aggregate	Gasoline	12675.3031	419547.4515	28.73311055	**14.60**		**0.1653%**	
Los Angeles	2045	LHD2	Aggregate	Aggregate	Diesel	32223.55438	1061440.126	57.62697698	**18.42**		**0.4183%**	
Los Angeles	2045	MCY	Aggregate	Aggregate	Gasoline	201380.6887	1123986.397	26.82485429	**41.90**		**0.4429%**	
Los Angeles	2045	MDV	Aggregate	Aggregate	Gasoline	1125553.602	39987838.12	1629.001915	**24.55**		**15.7580%**	
Los Angeles	2045	MDV	Aggregate	Aggregate	Diesel	12123.86549	430573.9347	14.6035655	**29.48**		**0.1697%**	
Los Angeles	2045	MH	Aggregate	Aggregate	Gasoline	13197.66074	139512.4658	28.8086294	**4.84**		**0.0550%**	
Los Angeles	2045	MH	Aggregate	Aggregate	Diesel	7950.105149	76039.84173	7.647047801	**9.94**		**0.0300%**	
Los Angeles	2045	Motor Coach	Aggregate	Aggregate	Diesel	759.2630353	96425.3874	14.9570751	**6.45**		**0.0380%**	
Los Angeles	2045	OBUS	Aggregate	Aggregate	Gasoline	1749.081448	47169.38289	8.213467191	**5.74**		**0.0186%**	
Los Angeles	2045	PTO	Aggregate	Aggregate	Diesel	0	89562.17753	15.36128646	**5.83**		**0.0353%**	
Los Angeles	2045	SBUS	Aggregate	Aggregate	Gasoline	1072.066353	46638.94263	4.662067912	**10.00**		**0.0184%**	
Los Angeles	2045	SBUS	Aggregate	Aggregate	Diesel	745.472558	15325.63121	1.850941789	**8.28**		**0.0060%**	
Los Angeles	2045	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	20.92741562	1505.129548	0.146124325	**10.30**		**0.0006%**	
Los Angeles	2045	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	25.73984427	2068.44487	0.200739118	**10.30**		**0.0008%**	
Los Angeles	2045	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	116.5957061	5378.595097	0.523755717	**10.27**		**0.0021%**	
Los Angeles	2045	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	304.4897418	61897.62276	5.280484069	**11.72**	**MHD**	**0.0244%**	**MHD**
Los Angeles	2045	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	3060.561825	100698.889	10.30307899	**9.77**	**9.12007723**	**0.0397%**	**0.9571%**
Los Angeles	2045	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	3147.312009	103696.2793	10.62827573	**9.76**		**0.0409%**	
Los Angeles	2045	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	9623.027746	316990.295	32.47339851	**9.76**		**0.1249%**	
Los Angeles	2045	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	3299.264298	167068.6797	17.16995455	**9.73**		**0.0658%**	
Los Angeles	2045	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	3941.948115	152761.732	15.51423336	**9.85**		**0.0602%**	
Los Angeles	2045	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	9082.292876	351762.4775	35.76287443	**9.84**		**0.1386%**	
Los Angeles	2045	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	8089.576476	313304.6283	31.84131883	**9.84**		**0.1235%**	
Los Angeles	2045	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	4980.79483	196565.2462	20.19182669	**9.73**		**0.0775%**	
Los Angeles	2045	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	106.855173	5019.144032	0.506273192	**9.91**		**0.0020%**	
Los Angeles	2045	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	2313.237259	134167.0395	12.34204477	**10.87**		**0.0529%**	
Los Angeles	2045	T6 OOS Class 4	Aggregate	Aggregate	Diesel	28.1682936	2070.854292	0.188602031	**10.98**		**0.0008%**	
Los Angeles	2045	T6 OOS Class 5	Aggregate	Aggregate	Diesel	34.6477736	2840.8397	0.25872584	**10.98**		**0.0011%**	
Los Angeles	2045	T6 OOS Class 6	Aggregate	Aggregate	Diesel	156.8747314	7423.195413	0.677428147	**10.96**		**0.0029%**	
Los Angeles	2045	T6 OOS Class 7	Aggregate	Aggregate	Diesel	193.4118243	53975.86132	4.39974839	**12.27**		**0.0213%**	
Los Angeles	2045	T6 Public Class 4	Aggregate	Aggregate	Diesel	386.8993632	13062.69732	1.398409711	**9.34**		**0.0051%**	
Los Angeles	2045	T6 Public Class 5	Aggregate	Aggregate	Diesel	274.5108164	9280.110743	0.996430578	**9.31**		**0.0037%**	
Los Angeles	2045	T6 Public Class 6	Aggregate	Aggregate	Diesel	326.6795817	11016.13973	1.176370042	**9.36**		**0.0043%**	
Los Angeles	2045	T6 Public Class 7	Aggregate	Aggregate	Diesel	1610.020339	66243.35004	6.902574198	**9.60**		**0.0261%**	
Los Angeles	2045	T6 Utility Class 5	Aggregate	Aggregate	Diesel	274.0473317	10821.87998	1.078705204	**10.03**		**0.0043%**	
Los Angeles	2045	T6 Utility Class 6	Aggregate	Aggregate	Diesel	51.83065475	2046.03473	0.203959157	**10.03**		**0.0008%**	
Los Angeles	2045	T6 Utility Class 7	Aggregate	Aggregate	Diesel	57.74076599	2801.800648	0.277627575	**10.09**		**0.0011%**	
Los Angeles	2045	T6TS	Aggregate	Aggregate	Gasoline	7003.904891	334253.6522	55.86186705	**5.98**		**0.1317%**	
Los Angeles	2045	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	9545.901367	2010780.696	267.9449653	**7.50**		**0.7924%**	
Los Angeles	2045	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	10593.49893	3077799.51	389.7431428	**7.90**	**HHD**	**1.2129%**	**HHD**
Los Angeles	2045	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	4561.911346	1117581.919	143.1248181	**7.81**	**16.0233333**	**0.4404%**	**3.8761%**
Los Angeles	2045	T7 POLA Class 8	Aggregate	Aggregate	Diesel	8760.678799	1438390.869	197.7709411	**7.27**		**0.5668%**	
Los Angeles	2045	T7 Public Class 8	Aggregate	Aggregate	Diesel	1449.869082	55138.25593	8.683152702	**6.35**		**0.0217%**	
Los Angeles	2045	T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	379.2432446	24866.57508	3.601389704	**6.90**		**0.0098%**	
Los Angeles	2045	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	1517.50466	73287.69306	11.06238732	**6.62**		**0.0289%**	
Los Angeles	2045	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	7567.146821	321148.182	48.37789588	**6.64**		**0.1266%**	
Los Angeles	2045	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	85.08521581	5523.125417	2.040253722	**2.71**		**0.0022%**	
Los Angeles	2045	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	26465.28019	1698328.487	229.8520583	**7.39**		**0.6693%**	
Los Angeles	2045	T7 Utility Class 8	Aggregate	Aggregate	Diesel	296.9318394	12029.83312	1.792133546	**6.71**		**0.0047%**	
Los Angeles	2045	T7IS	Aggregate	Aggregate	Gasoline	9.808744743	1142.594283	0.216495253	**5.28**		**0.0005%**	
Los Angeles	2045	UBUS	Aggregate	Aggregate	Gasoline	204.0812423	11849.73521	0.779784021	**15.20**		**0.0047%**	

On-road Mobile (Operational) Energy Usage

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Unmitigated:

Step 1:

Therefore:

Average Daily VMT:

1,026,827 Source: Kittelson & Associates

Step 2: Given:

Fleet Mix (EMFAC2021)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
43.2430%	3.7319%	0.28884565	0.159276977	0.021156775	0.58%	0.9571%	3.8761%	0.0186%	0.0047%	0.4429%	0.00024418	0.00084943

And:

Gasoline MPG Factors for each Vehicle Class - Year 2045 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
35.98	30.81	29.89	24.55	16.42	14.60	N/A	N/A	5.74	15.20	41.90	10.00	4.84

Therefore:

Weighted Average MPG Factors

Gasoline: **29.9**

Step 3: **Therefore:**

34,367 daily gallons of gasoline

or

12,544,095 annual gallons of gasoline

Off-road (i.e. On-site) Mobile (Construction) Energy Usage

Note: Assu For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.
Demolition, Site preparation and grading off-road mobile vehicle on-site gallons of fuel are calculated below.

Given Factor:	**40,485.0**	**metric tons**	**CO2** **(provided in CalEEMod Output File)**	
Conversion Factor:	2204.6262	pounds	per metric ton	
Intermediate Result:	**89,254,292**	**pounds**	**CO2**	
Conversion Factor:	22.38	pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	**3,988,127**	**gallons**	**diesel fuel**	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Demolition - 2023 to 2045	9,061
Site Preparation - 2023 to 2045	13,989
Grading - 2023 to 2045	17,435

On-road Mobile (Construction) Energy Usage - Demolition

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1: **Total Daily Worker Trips (CalEEMod output)**

15

Worker Trip Length (miles) (CalEEMod output)

18.5

Therefore:

Average Worker Daily VMT:

278

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

LDA	LDT1	LDT2
28.42	23.75	23.10

Therefore:

Weighted Average Worker MPG Factor

25.92

Step 3: **Therefore:**

11 Worker daily gallons of gasoline (all workers)

Step 4: 5,805 **# of Days (CalEEMod ouput)**

Therefore:

Result: **62,142 Total gallons of gasoline (all workers)**

On-road Mobile (Construction) Energy Usage - Site Preparation

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

18.5

Therefore:

Average Worker Daily VMT:

333

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

LDA	LDT1	LDT2
28.42	23.75	23.10

Therefore:

Weighted Average Worker MPG Factor

25.92

Step 3: **Therefore:**

13 Worker daily gallons of gasoline

Step 4: 5,805 **# of Days (CalEEMod Output)**

Therefore:

Result: **74,571** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Grading

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

20

Worker Trip Length (miles) (CalEEMod Output)

18.5

Therefore:

Average Worker Daily VMT:

370

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

LDA	LDT1	LDT2
28.42	23.75	23.10

Therefore:

Weighted Average Worker MPG Factor

25.9

Step 3: **Therefore:**

14 Worker daily gallons of gasoline

Step 4: 5,805 **# of Days (CalEEMod Output)**

Therefore:

Result: **82,857 Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Building Construction

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1:

Total Daily Worker Trips (CalEEMod Output)

9,990	500

Assumes 5% of workers on-site on a given day

Total Daily Vendor Trips (CalEEMod Output)

3,657	183

Worker Trip Length (miles) (CalEEMod Output)

18.5

Vendor Trip Length (miles) (CalEEMod Output)

10.2

Therefore:

Average Worker Daily VMT:

9,241

Average Vendor Daily VMT:

1,865

Step 2:

Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Fleet Mix for Workers (CalEEMod Output)

MHD	HHD
0%	100%

Assumed Fleet Mix for Vendors

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

Gasoline:

LDA	LDT1	LDT2
28.42	23.75	23.10

Diesel:

MHD	HHD
9.65	7.48

Therefore:

Weighted Average Worker (Gasoline) MPG Factor

25.92

Weighted Average Vendor (Diesel) MPG Factor

7.48

Step 3:

Therefore:

356 Worker daily gallons of gasoline

Therefore:

249 Vendor daily gallons of diesel

Step 4:

5,805 **# of Days (CalEEMod Output)**

Therefore:

2,069,342 Total gallons of gasoline

Therefore:

1,447,872 Total gallons of diesel

On-road Mobile (Construction) Energy Usage - Paving

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

18.5

Therefore:

Average Worker Daily VMT:

278

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

LDA	LDT1	LDT2
28.42	23.75	23.10

Therefore:

Weighted Average Worker MPG Factor

25.9

Step 3: **Therefore:**

11 Worker daily gallons of gasoline

Step 4: 5,805 **# of Days (CalEEMod Output)**

Therefore:

Result: **62,142 Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Architectural Coating

Note: Assumes that all vehicles that are generated as part of project use gasoline as a fuel source (for simplicity), since the vast majority of vehicles generated by project would use it.

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

1998	100

Assumes 5% of workers on-site on a given day

Worker Trip Length (miles) (CalEEMod Output)

18.5

Therefore:

Average Worker Daily VMT:

1,848

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class - Year 2023 (EMFAC2021 output)

LDA	LDT1	LDT2
28.42	23.75	23.10

Therefore:

Weighted Average Worker MPG Factor

25.9

Step 3: **Therefore:**

71 Worker daily gallons of gasoline

Step 4: 5,805 **# of Days (CalEEMod Output)**

Therefore:

Result: **413,868** **Total gallons of gasoline**

Appendix C: Biological Resources

CNDDB 1-Mile Search

NAME	SCIENTIFIC NAME	COMMON NAME	RECORD NUMBER	DATE LAST OBSERVED	LOCATION	LOCATION DETAILS	LOCATION DESCRIPTION	LATITUDE	LONGITUDE	ACCURACY	EXTENT	ELEVATION	ELEVATION DETAILS	ELEVATION DESCRIPTION	OWNERSHIP	OWNERSHIP DESCRIPTION	MANAGEMENT	MANAGEMENT DESCRIPTION	EVALUATION	EVALUATION DETAILS	EVALUATION DESCRIPTION	LAST UPDATED	LAST UPDATED DETAILS	LAST UPDATED DESCRIPTION	DATA SOURCE	DATA SOURCE DETAILS	DATA SOURCE DESCRIPTION
Bombus californiensis pop. 1	Bombus californiensis pop. 1	Western bumble bee	CNDB-00000	2, 2, 2010	1	1	1 km wide	1	1	Point	Non-extirpated	0	0	Unknown	Unknown	Unknown	None	None	G3	S1		2020-12-11	1		Museum specimen		
Bombus californiensis pop. 1	Bombus californiensis pop. 1	Western bumble bee	CNDB-00000	2, 2, 2010	1	1	1 km wide	1	1	Point	Non-extirpated	0	0	Unknown	Unknown	Unknown	None	None	G3	S1		2020-12-11	1		Museum specimen		
Bombus terricola	Bombus terricola	Bumble bee	CNDB-00000	1900-01-01	1000	1000	1 km wide	1000	1000	Point	Non-extirpated	None	None	Unknown	Private land	Non-profit	Preserve	Preserve	G3G4	S3S4		2020-12-11	1000		Museum specimen		
Bombus vosnesenskii	Bombus vosnesenskii	Yellow-faced bumble bee	CNDB-00000	1900-01-01	1000	1000	1 km wide	1000	1000	Point	Non-extirpated	None	None	Unknown	Private land	Non-profit	None	None	G5	S3		2020-12-11	1000		Museum specimen		
Bombus vosnesenskii pop. 1	Bombus vosnesenskii pop. 1

CNDDB 9-Quad Search

Appendix D: Cultural and Paleontological Resources Study

Cultural and Paleontological Resource Study for the General Plan Update City of Lawndale, Los Angeles County

Prepared for:

City of Lawndale
Community Development Department
14717 Burin Avenue
Lawndale, CA 90260

De Novo Planning Group
180 East Main St. #108
Tustin, CA 92780

Prepared by:

Duke Cultural Resources Management, LLC
Edgar Alvarez, Curt Duke, Nicholas F. Hearth, and Benjamin Scherzer
18 Technology Drive, Ste. 103
Irvine, CA 92618
(949) 356-6660
curt@dukecrm.com
www.DukeCRM.com

DUKE CRM Project Number: C-0325

October 2020
(Updated July 2023)

TABLE OF CONTENTS

TABLE OF CONTENTS i
MANAGEMENT SUMMARY ii
INTRODUCTION 1
Project Location 1
Project Description 1
Regulatory Setting 2
SETTING 6
Geomorphological Setting 6
Environmental 7
Cultural 7
METHODS 9
Paleontological Resources Records Search 10
Cultural Resources Records Search 10
Field Surveys 10
Personnel 10
RESULTS 11
Paleontological Resources Records Search 11
Cultural Resources Records Search 12
Cultural Resources Field Survey 14
RECOMMENDATIONS 19
Historic Resources 19
Archaeological Resources 20
Paleontological Resources 20
CONCLUSIONS 21
REFERENCES 22

FIGURES

Figure 1. Example of Colonial Revival architecture at approximately 4555 171st Street, view north 14
Figure 2: Project area overview along Grevellia Avenue, view north. 15
Figure 3: Project area overview along Hawthorne Boulevard, view south. 15
Figure 4: Project area overview along Hawthorne Boulevard and West 147th Street, view north. 16
Figure 5: Single Family Residence at 4039 160th St, view north 17
Figure 6: Single Family Residence at 4061 W. 147th St., view northwest 17
Figure 7: Single Family Residence at 14606 Freeman Ave, view east 18
Figure 8: Single Family Residence at 4555 171st St., view north 18
Figure 9: Commercial Building at 16715 Hawthorne Boulevard, view west 19

TABLES

Table 1. Geologic Units and Their Paleontological Potential 12
Table 2. Cultural Resources with the City of Lawndale 12
Table 3. Cultural Resources Locations Visited during Reconnaissance Survey 16

APPENDICES

Appendix A: Project Maps
Appendix B: Resumes
Appendix C: Cultural Resources Studies Bibliography

MANAGEMENT SUMMARY

DUKE Cultural Resources Management, LLC (DUKE C R M) is under contract to De Novo Planning Group, to conduct a cultural and paleontological resources assessment for the Lawndale General Plan Update and Hawthorne Specific Plan Update (Project). The Project includes the City of Lawndale (City) and a length of Hawthorne Boulevard and limited side streets in total comprising approximately 1,260 acres.

The purpose of this report is to inventory the previously recorded paleontological and cultural resources in the City and Specific Plan area to assess the potential for impacts to these resources during implementation of the Project. This effort was completed in compliance with the California Environmental Quality Act (CEQA).

DUKE CRM requested paleontological records searches for the Project from the Natural History Museum of Los Angeles County and fossil localities within a three 3 mile radius were investigated on the online University of California Museum of Paleontology collections, Paleobiology Database, FAUNMAP, and other available published resources. Fossil localities have been recorded in deposits similar in age to those underlying the Project.

DUKE CRM requested a records search from the South Central Coastal Information Center (SCCIC). Records from the SCCIC indicate that there are at least 12 built environment historic resources mapped within the City of which nine are listed in the Built Environment Resource Directory maintained by the State Office of Historic Preservation. No prehistoric or historic archaeological resources have been previously recorded in the Project boundaries. A city-wide reconnaissance resource survey was conducted. A combination of digital, windshield, and reconnaissance survey methods were employed. No cultural resources were recorded.

INTRODUCTION

DUKE Cultural Resources Management, LLC (DUKE C R M) is under contract to De Novo Planning Group to conduct a cultural and paleontological resources assessment for the Lawndale General Plan Update and Hawthorne Boulevard Specific Plan Update Project (Project). The General Plan area consists of the City of Lawndale (City) comprising approximately 1,260 acres. The Hawthorne Boulevard Specific Plan is entirely within the General Plan and does not add any acreage to the General Plan. The purpose of this report is to inventory recorded paleontological, cultural, and historical resources in order to assess the potential for impacts to them during the implementation of the Project and to assist the City in managing these resources in their long term growth and development. This effort was completed in compliance with the California Environmental Quality Act (CEQA).

Project Location

The City of Lawndale is in the Los Angeles Basin situated approximately 26 miles southwest of downtown Los Angeles, and three miles from the Pacific Ocean (Appendix A, Map 1). Regional access is provided by the Interstate 405 (I-405), State Route 78 (SR 107), and SR 91. The City is located in the former *Sausal Redondo* Rancho in Township 3 south, Range 14 west in what would be sections 20, 21, and 28, as depicted on the USGS *Torrance, Calif.* 7.5 Minute Quadrangles (see Appendix A, Map 2). The central artery of the City is Hawthorne Boulevard. The Hawthorne Boulevard Specific Plan Update is located between Rosecrans Boulevard on the north and Redondo Beach Boulevard on the south. It also includes small segments of Redondo Beach Boulevard and other side streets. Generally, the area of the Project is nestled between the Cities of Hawthorne to the north, Redondo Beach to the west and south, and Torrance to the south and east. (Appendix A, Map 3).

Project Description

The project includes a comprehensive update to the City's General Plan (1992) and the Hawthorne Boulevard Specific Plan (1999) goals and polices to assist the City with their long-term growth and development. A Program Environmental Impact Report will be prepared to analyze the potential impacts associated with implementation of the new General Plan and Specific Plan.

Cultural Resource: Cultural resources are tangible remains of past human activity. These may include buildings, structures, prehistoric and historic archaeological sites, historic or prehistoric objects, rock art, earthworks, canals, and landscapes. These nonrenewable resources may yield unique information about past societies and environments and provide answers for modern day social and conservation problems. A cultural resource is not necessarily significant and is not necessarily eligible for the California Register of Historical Resources (CRHR).

Historical Resource: A historical resource is defined as any cultural resource that is either listed in or determined eligible for the CRHR, included in a local register of historical resources, or identified as significant in a historical resources survey (CEQA, PRC § 21084.1), and can be any of the above-listed types of cultural resources.

Tribal Cultural Resource: Tribal Cultural Resources (TCRs) are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the CRHR or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant (CEQA, PRC § 21074).

Paleontological Resource: The term paleontological resource refers to any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth (SVP 2019).

Regulatory Setting

State Regulations

California Environmental Quality Act of 1970, as amended

The California Environmental Quality Act of 1970 (CEQA) is legislation that requires a Lead Agency to evaluate if a proposed project would have a significant adverse effect on the environment, including historical resources (defined above). CEQA Guidelines pertaining to historical resources (Section 15064.5(b)(1)) state that "A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired".

California Register of Historical Resources

The CRHR is the state-maintained list of cultural resources found to be historically significant. The CRHR is maintained by the California Department of Parks and Recreation. Much like the NRHP, the CRHR has four major criteria that a cultural resource must meet to be eligible for inclusion on the list:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

To be considered eligible for the CRHR a historical resource should also possess integrity of location, design, setting, materials, workmanship, feeling and association. As used here, integrity is defined as the ability of a historical resource to convey its significance. To determine which of these factors are most important will depend on the property being evaluated and which particular CRHR criterion under which the resource is considered eligible for listing. The period of significance is the period of time in which significant events or themes occurred. Alterations and impacts that affect the period of significance and overall integrity of the resource and its eligibility for the CRHR.

Furthermore, CEQA requires the lead agency consider whether or not a project will significantly affect unique archaeological resources that may be ineligible for listing in the CRHR and to avoid these unique archaeological resources when possible or mitigate any effects to less than significant levels (PRC 21083.2). As stated by CEQA, a unique archaeological resource means an archaeological artifact, object, or site that clearly demonstrates with a high probability that it meets, without merely adding to the current body of knowledge, any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC section 21083.2(a); CEQA Guidelines section 15064.5(c)(4).) However, if a non-unique archaeological resource qualifies as a TCR (PRC 21074(c); 21083.2(h)), further consideration of significant impacts is required.

In addition, excavation must be stopped whenever human remains are uncovered, and the county coroner must be called in to assess the remains (Section 15064.5[e] of the CEQA Guidelines). If the county coroner determines that the remains are those of a Native American, the Native American Heritage Commission (NAHC) must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in Section 15064.5 of the CEQA Guidelines must be followed.

California Historical Landmarks

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have been determined to have statewide historical significance. These resources are evaluated according to four criteria:

1. The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
2. Associated with an individual or group having a profound influence on the history of California.
3. A prototype of, or an outstanding example of, a period, style, architectural movement or construction; or is one of the more notable works, or the best surviving work in a region, of a pioneer architect, designer, or master builder.

CHLs must also be approved for designation by the County Board of Supervisors or the City/Town Council in which the resource is located; must be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. The effect of designation on a property or resource is:

- Limited protection against alteration or demolition. Environmental review may be required under CEQA if a property is threatened by a project. The relevant local planning agency should be contacted for more information.
- If the municipality or local government participates in the Mills Act Program, then a historic property owner may enter into a contract with the local assessor for property tax reduction.
- Local building inspector must grant code alternative provided under the California Historical Building Code (CHBC). Registration will be recorded on the property deed.
- Automatic listing in CRHR.
- Bronze plaque at site (underwritten by local sponsor) ordered through the California Office of Historic Preservation (OHP); highway directional sign available through local Department of Transportation (Caltrans) district office.

A designated CHL needs to have the written consent of the property owner, and the local government is given 60 days for comment on any application for designation prior to the State Historical Resources Commission considers the nomination.

California Points of Historic Interest

California Points of Historical Interest (CPHI) are sites, buildings, features, or events that are of local (City or County) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. CPHIs designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR.
No resource may be designated as both a CHL and a CPHI. If a CPHI is subsequently granted status as a CHL, the CPHI designation will be retired. To be eligible for designation as a CPHI, a resource must meet at least one of the following criteria:

1. The first, last, only, or most significant of its type within the local geographic region (City or County).
2. Associated with an individual or group having a profound influence on the history of the local area.
3. A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

The effect of designation on a property or resource is:

- Limited protection against alteration or demolition. Environmental review may be required under CEQA if a property is threatened by a project. The relevant local planning agency should be contacted for more information.

- If the municipality or local government participates in the Mills Act Program, then a historic property owner may enter into a contract with the local assessor for property tax reduction.
- Local building inspector must grant code alternative provided under State Historic Building Code. Registration will be recorded on the property deed.

A designated CPHI needs to have the written consent of the property owner, and the local government is given 60 days for comment on any application for designation prior to the State Historical Resources Commission considers the nomination.

California Historical Building Code

The California Historical Building Code (CHBC) is defined by Sections 18950 to 18961 of Division 13, Part 2.7 of the Health and Safety Code. The CHBC provides guidelines and regulations for the preservation and contemporary use of historic structures and buildings that are considered "qualified historical buildings or structures." The CHBC specifically provides alternative building regulations and guidelines for permitting repairs, alterations and additions necessary for preservation, rehabilitation, relocation, related construction, change of use, or continued use.

Section 8-201 of the CHBC (2016) defines a "qualified historical building or structure" as "any structure or property, collection of structures, and their associated sites deemed of importance to the history, architecture, or culture of an area by an appropriate local or state governmental jurisdiction. This includes structures on existing or future national, state or local historical registers or official inventories, such as the National Register of Historic Places (NRHP), CHL, CPHI, and city or county registers or inventories of historical or architecturally significant sites, places, historic districts, or landmarks.

Mills Act

The City of Lawndale authorized the creation of a Mills Act Program in 2010 for the preservation of historically significant properties. The Mills Act of 1972 is an economic incentive program by the State of California to encourage private property owners to restore and preserve qualified historic buildings. Local governments (Counties and Municipalities) can choose to implement and administer contracts with property owners to provide tax abatement, establish their own criteria for qualified historic buildings, and determine how many contracts they will allow in their jurisdiction. California State Codes relating to the Mills Act include the California Government Code, Article 12, Sections 50280 – 50290 and the California Revenue and Taxation Code, Article 1.9, Sections 439 – 439.4.

The Mills Act also known as the Historical Property Contract, is a formal agreement executed between the City of Lawndale and the property owner for a revolving, automatic ten-year term. Owners of qualified historic properties may apply for the program if they pledge to rehabilitate and maintain the historical and architectural character of their properties for the minimum ten-year life of the contract. A qualified historic property in the City of Lawndale is a property listed on the NRHP, the CRHR, or CHL.

Contracts are renewed each year so that the term of the contract can extend for ten years automatically. Under this contract, property owners agree to restore, maintain, and protect the property in accordance with specific historic preservation standards and other conditions identified in the contract. Periodic inspections by City and County of Los Angeles officials ensure proper upkeep of the property to the standards included in the contract. Either the property owner or the City may elect not to renew for any reason. The effect of non-renewal is to terminate the contract at the end of the current ten-year term. The owner may also petition the City to initiate an immediate cancellation. If cancelled, a penalty is imposed. The City may also cancel the contract, but only in the case of breach of the contract conditions. The contract is transferred to new owners if the property is sold and is binding to all successive owners.

Participation in the Mills Act is a benefit to qualified property owners, especially for recent buyers of historic properties but also for current owners of historic buildings who have made major improvements to their properties. An income approach to value rather than by the standard market approach determines the appraised value. The income approach, divided by a capitalization rate, determines the assessed value of the

property. In general, the income potential for an owner-occupied residential property is calculated by examining comparable rents for similar properties in the area, while the income amount on a commercial property is based on actual rent received. Because rental values vary from area to area, actual property savings may vary. In addition, as counties are required to assess all property annually, Mills Act properties may realize slight increases in property taxes each year.

Senate Bill 18

Senate Bill 18 (SB 18) states that prior to the amendment or adoption of any general plan or specific plan or the designation of open space land proposed on or after March 1, 2005, the local or county government shall conduct consultation with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. A Cultural Place is defined as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC 5097.9), or;
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the CRHR pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5067.995).

The intent of SB 18 is to establish "meaningful consultation" between tribal governments and local governments (government-to-government) at the earliest possible point in the planning process so that Cultural Places can be identified and preserved and to determine the necessary levels of confidentiality regarding Cultural Place locations and uses. SB 18 is not part of CEQA.

Assembly Bill 52

Assembly Bill 52 (AB 52) required an update to Appendix G (Initial Study Checklist) of the CEQA Guidelines to include questions related to impacts to TCRs. The law went into effect on July 1, 2015 with the changes to Appendix G approved on September 27, 2016. The Lead Agency would now also be charged with engaging with tribal governments at the earliest possible point in the planning process so that TCRs can be identified and preserved and to determine the necessary levels of confidentiality regarding TCR locations and uses.

Municipal Regulations

City of Lawndale General Plan 1992

The 1992 Lawndale General Plan addresses cultural resources in Chapter III, Resource Management, Section 2, Conservation Element. The addition of a conservation element is mandated under state government code section 65302(d). The overall purpose of Chapter 2 is to address increasing public concern for environmental quality, such as clean water and air, and the prevention and control of pollution, in light of growth and urbanization. The conservation element intends to:

- Promote the protection, maintenance and use of the state's natural resources;
- Prevent the wasteful exploitation, destruction, and neglect of the state's natural resources; and
- Recognize the natural resources must be maintained for the ecological value as well as for their direct benefits to the public.

The General Plan (1992:2-2) found that:

> "The City of Lawndale is a highly urbanized area that functions primarily as bedroom community within the surrounding Los Angeles South Bay region. Because of the City's high degree of urbanization, there are few natural resources remaining."

The General Plan (1992:2-5) identified several private residences that, at the time, were believed to be of "local historical interest". Mentioned among these was the First Congregational Church at 4521 W. 147th Street built in 1906 and the first church in the City. No other historic in age (50+ years or older) civic or public structures were known to exist within the City. Importantly, it was asserted that in terms of potential significant residential development that:

> "Many of the significant residential buildings were moved into Lawndale from other areas within the Los Angeles region. Many of these buildings are unknown and unrecognizable to the community because they are not located in one general area of the City, and many are concealed behind mature landscaping, or by remodeling that has 'modernized' or significantly customized their appearance." (City of Lawndale 1992:2-5)

The 1992 General Plan established Goal 4 for Cultural Resources:

> "Promote the preservation and rehabilitation of cultural resources that are significant to the Lawndale community because of their age, architecture, history, or symbolism."

The City adopted six related policies for implementation of the above Goal:

- Policy 4a: Promote the preservation and/or conservation of historic structures, places, and or architectural features.
- Policy 4b: Investigate the appropriateness and feasibility of implementation a Historic Preservation Ordinance for the preservation of historic structures.
- Policy 4c: Investigate the feasibility of implementing a local historic registry program.
- Policy 4d: Encourage the preservation of historic structures on their existing sites, or relocation if necessary and feasible.
- Policy 4e: Discourage the demolition or movement of historic structures without an evaluation of the condition of the structure, the cost of rehabilitation, and feasibility of preservation or conservation alternatives.
- Policy 4f: Encourage the adaptive re-use of historic structures.

The General Plan (1992) also details the implementation programs for cultural resources:

- 4.1 Historic Preservation: The City shall develop and implement a Historic Preservation Ordinance for the preservation of historic residences and structures.
- 4.2 Historic Registry: Establish the feasibility of implementing a local historic registry program that provides incentives for retrofitting and maintenance, as well as public recognition, of the local resource.
- 4.3 Demolition Review: The City shall prohibit the demolition or movement of historic structures without an evaluation of the condition of the structure, the costs of rehabilitation, and the feasibility of preservation or conservation alternatives.

SETTING

The setting of the Project, composed of environmental, cultural, and historic backgrounds contextualize the findings of the current study. The Project covers 1,260 acres that overlap a limited number of geological, geomorphological, topographic components. Various other factors of the natural setting include water accessibility, climate, and broad patterns of soil development. The prehistoric, ethnographic and historical settings form the backdrop to human occupation of the Project. Each of the contextual elements to this study are considered below.

Geomorphological Setting

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The Project is located on the western end of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest trending mountain ranges and valleys following faults branching from the San Andreas Fault. The Peninsular Ranges are bound to the east by the Colorado Desert and extend north to the San Bernardino – Riverside County line (Norris and Webb 1976), west into the submarine continental shelf, and south to the California state line.

Locally, the City of Lawndale is located within the western end of the inland portion of the Los Angeles Basin, an actively subsiding basin bound by the Santa Monica and San Gabriel Mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south (Yerkes et al. 1965). The City is in the southwestern block of the Los Angeles Basin, which was the site of initial basin deformation, and is currently dominated by folded marine strata (Hauksson 1990). The geologic units underlying the Project record coastal and inland deposition during the Pleistocene Epoch (2.5 million years ago to 11,700 years ago). Information regarding the specific geologic units and their paleontological sensitivity are discussed in detail in the results section of this report.

Environmental

The Project is broadly located within the Southern California/Northern Baja Coast region and it is composed of coastal and alluvial plains, marine terraces, and low hills within an area extending over 200 miles south into Baja California. The area has been largely cleared through overgrazing, agriculture and urban development. Before these modern and historic processes occurred, coastal sage scrub and chaparral vegetation communities with many endemic species once were widespread. Plant species in coastal sage scrub communities includes coastal cholla, white sage, golden yarrow, California buckwheat, black sage, and chamise. The chaparral communities on the low hills include mountain-mahogany, ceanothus, manzanita, and scrub oak though stands of coast and canyon live oaks, poison oak, and black walnut can also be present.

Specifically, the Project is located within the Los Angeles Plain ecoregion. Ecoregions denote general similarity in ecosystems and environmental resources. Moist and cool marine air greatly moderates temperatures and rainfall in the Los Angeles Plain with annual precipitation ranging from 10 to 17 inches. The ecoregion is nearly level with flat floodplains and terraces and very gently to gently sloping alluvial fans. The soil temperature regime is thermic and soil moisture regime is xeric. Hydrology has been greatly modified and channelized. The Los Angeles River drains the San Fernando Valley and San Gabriel Mountains (Griffith et al. 2016).

Cultural

Prehistory

Of the many chronological sequences proposed for southern California, two primary regional syntheses are commonly used in the archaeological literature. The first, advanced by Wallace (1955), defines four cultural horizons for the southern California coastal province, each with characteristic local variations:

I. Early Man (~9000–8500 B.P.)
II. Milling Stone (8500–4000 B.P.)
III. Intermediate (4000–1500 B.P.)
IV. Late Prehistoric (1500~200 B.P.)

Warren (1968:1) chose instead to define "traditions" (La Jolla, Encinitas, Campbell, and Chumash, Yuman, or Shoshonean) that are "a generic unit comprising of historically related phases. Cultural traditions are identified and distinguished from one another on the basis of differences in cultural patterns reflected in differences in artifact types and assemblages and difference in cultural features". While Warren (1968) keeps environment and cultural traditions distinct, his efforts marked that the relationship between them, through time was important for archaeological study. These two chronologies are still commonly used in tandem to discuss the chronology of southern California.

King (1990), in his work in the Santa Barbara Channel region, introduced yet another chronological scheme that was based on the seriation of shell beads and grave goods backed by radiocarbon dates. King's chronology is divided into three periods, Early, Middle, and Late with date ranges for each. King's chronology is widely used in the Santa Barbara region and has been heavily employed in the discussion of the nature of the emergence of social complexity on the southern California coast (Arnold 1992; Arnold and Munns 1994; Gamble 2005; Kennett and Kennett 2000; Raab and Larson 1997). King (1990) argued that correlations can be made between the physical characteristics of beads and the social contexts in which they were used. King

analyzed beads and other artifacts, in addition to mortuary practices to demonstrate that changes in material culture reflect changes in society.

The works of Wallace (1955), Warren (1968) and King (1990) reflect a variety of methods to develop temporal sequences for describing archaeological remains. Refinements in methods, specifically the application of radiocarbon dating has significantly improved chronology building. In addition, applying successful models used in other regions, such as King's (1990) application of the Bennyhoff and Hughes (1987) method of shell bead seriation to the southern California region has aided in the refinement of chronology building for the region. Complications such as the timing of the adaptation of "marker" artifact types, arise when broad regional chronologies are applied to small local areas that do not fit neatly into large macro schemes. Likewise, the subtle, yet significant nuances of local , micro-chronologies often complicate attempts to create a simple chronology that can be applied to a large region, such as southern California.

Ethnography

The project is located within the boundaries of Gabrielino or Tongva Indians. The Gabrielino Indians are named because of their association with the *Mission San Gabriel Arcángel*. The Gabrielino are one of the least known Native American groups in California. Generally, their territory included all of the Los Angeles Basin, parts of the Santa Ana and Santa Monica Mountains, along the coast from Aliso Creek in the south to Topanga Canyon in the north, and San Clemente, San Nicolas, and Santa Catalina Islands.

The Gabrielino spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrielino shared this language with their neighboring groups to the south and east (Bean and Smith 1978, Shipley 1978).

Groups of Gabrielino lived in villages that were autonomous from other villages. Each village had access to hunting, collecting, and fishing areas (Bean and Smith 1978). Villages were typically located in protected coves or canyons near water. Acorns were the most important food for the Gabrielino, although the types and quantity of different foods varied by season and locale. Other important sources of food were grass and many other seed types, deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, quail, doves, ducks and other fowl, fish, shellfish, and marine mammals.

Typically, Gabrielino women gathered and men hunted, although work tasks often overlapped. Each village had a chief who controlled religious, economic, and warfare authorities. The chief had an assistant and an advisory council who assisted in important decisions and rituals. Each of these positions was hereditary being passed down from generation to generation (Bean and Smith 1978). According to mapping of Gabrielino villages undertaken by McCawley (1996), no known villages would be located with the City. The two nearest Gabrielino villages, which may compose large areas rather than just a single location, are *Swaanga* approximately 10 miles to the southeast and *Waachnga* approximately five miles to the northwest (McCawley 1996:Map 8). The Kirkman-Harriman Pictorial and Historical Map of Los Angeles (1938) also does not identify any Gabrielino villages within the City.

History

In California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). The first Europeans in California were the Spanish. In 1542 Juan Rodriguez Cabrillo entered what was to become known as San Diego Harbor (Rolle 2003) where he met a group of Kumeyaay Indians while on shore. Over the next few hundred years there were several maritime excursions along the California coast, but it would be more than 225 years until the Spanish established a permanent settlement. To protect its interests, Spain sent four excursions into California, two by land and two by sea. The entire expedition was led by Captain Gaspar de Portolá, military commander of California (Rolle 2003). Portolá came through the Los Angeles basin area in 1769 while travelling from San Diego to Monterey. To fulfill some of the religious goals of the expedition Father Junípero Serra was sent to California to establish a system of Catholic Missions. It was not until two years later on September 8, 1771 that *Mission San Gabriel Arcángel* was established by Fathers Pedro Cambon and Angel Somera (Hoover et al. 1990).

Ten years later on September 4, 1781, Los Angeles was founded. Early settlers farmed and they built a system of *zanjas*, or irrigation ditches, to transport water from the Los Angeles River to plots of land. With Mexican Independence in 1821, Los Angeles and California experienced great economic independence and growth (Rolle 2003). By 1822, the Mexican government began to grant permits to its citizens along the southern coast for animal pasture. Governor of Alta California, Juan Alvarado, gave the *Rancho Sausal Redondo* land grant to Antonio Ignacio Ávila, son of Spanish soldier Cornelio Ávila, that encompassed the present-day cities of Lawndale, Inglewood, Hawthorne, Redondo Beach, Manhattan Beach, and Hermosa Beach. The total acreage of the land grant was roughly 40,000 acres; but when the United States Land Commission confirmed title, *Rancho Sausal Redondo* was reduced to 22,000 acres. The City of Lawndale is located in what was the southwestern corner of *Rancho Sausal Redondo*. Between 1820 and 1841 the population of Los Angeles tripled to 1,680. California was ceded to the U.S. in 1848 with the signing of the Treaty of Guadalupe Hidalgo (City of Lawndale 2020).

The Treaty of Guadalupe Hidalgo assured owners that prior, valid land grants would be honored if a claim was filed as required by the Land Act of 1851. Soon after, Antonio Ignacio Ávila filed a claim for *Rancho Sausal Redondo* and was awarded a patent in 1855 by the Public Land Commission. He later died in 1858 and his heirs sold the *Rancho* to pay for the probate costs. In 1868, ten years after his death, a Scottish nobleman named Sir Robert Burnett purchased the land grant from Ávila's heirs. Having also acquired the *Aquaje de la Centinela* parcel, Burnett combined both areas and named it Centinela Ranch. After doing so, Burnett gradually slowed cattle ranching and began to incorporate his prior specialization of sheep raising. In 1873, Burnett leased Centinela Ranch to Daniel and Catherine Freeman and retuned to his home in Scotland. The Freeman's continued to raise sheep but after a tumultuous two-year drought from 1875-1876, they began to plant barley along with several thousand citrus, almond, olive, and eucalyptus trees. The Freeman's made dry-land farming profitable and exported 3,000,000 bushels of barley and other crops to Liverpool and London well in to the 1880's (City of Lawndale 2020).

The history of what later would be Lawndale begins with the opening of the Redondo seaport in 1890 and the railroad service created between the port and Los Angeles. By 1902, the Los Angeles and Redondo railways passed along in what is now Hawthorne Boulevard, extending from Inglewood to Railroad Avenue. In March of 1905, real estate developer Charles B. Hopper subdivided and opened the southern portion of Centinela Ranch and named it Lawndale. It was marketed as an ideal poultry farming location for early settlers, but unfortunately a lack of buyers forced Hopper to change to smaller lots a year later. When the US Census was taken in 1910, the unincorporated town of Lawndale had already reached 142 residents. In the 1920's the discovery of oil transformed the Lawndale community into a town that built oil derricks, though the Great Depression muted this economic development. After WWII, Lawndale boomed primarily due to subsidized veteran housing and increased accessibility of the Harbor Freeway. Also, the Businessman's Group Association created zoning policies to promote and advertise the residential, commercial, and industrial advantages of Lawndale. Amid rapid commercial growth and urbanization of the Centinela Valley in 1958, zoning restrictions officially abolished agriculture in the community. On December 28, 1959, Lawndale was incorporated as a City in Los Angeles County, but long had a unique history and character (City of Lawndale 2020).

METHODS

The focus and purpose of this report are to support the CEQA process as part of the Project and, therefore are broad and programmatic in scope. Baseline paleontological, archaeological and historical data was compiled from record searches at various research facilities and online. Multiple survey methods, including desktop and field reconnaissance, were employed. Survey was limited due to lack of access to resources on private property and the shutdown of the Hawthorne Historical Society due to the Novel Coronavirus Pandemic. Research was also limited due to the same pandemic. The South Central Coastal Information at California State University, Fullerton was only able to respond with partial information as not all records are digital and therefore accessible.

Paleontological Resources Records Search
The geology of the Lawndale area has been mapped by Saucedo and others (2016) at a scale of 1:100,000. A paleontological records search were requested from the Natural History Museum of Los Angeles County (LACM). Fossil localities within 3 miles of the Project were investigated by DUKE CRM using the online University of California Museum of Paleontology collections, Paleobiology Database, FAUNMAP, and other published resources (Miller 1971; Jefferson 1991a, b). Additional background research was conducted in the Journal of Vertebrate Paleontology.

Cultural Resources Records Search
On April 9, 2020, Nicholas F. Hearth of DUKE C R M requested a records search at the South Central Coastal Information Center (SCCIC). The SCCIC provided the records search results on June 9, 2020. The SCCIC is part of the California Historical Resources Information System (CHRIS) and is located at California State University, Fullerton. The SCCIC records search included a review of all recorded historic and prehistoric archaeological sites within the City including the California OHP's Historic Resources Inventory (HRI) directory, as well as a review of known cultural resource survey and excavation reports. The California State Historic Property Data File (HPDF) was examined, which includes the NRHP, CRHR, CHL, and CPHI. The Built Environment Resource Directory (BERD) was also consulted.

Research
Throughout the course of the Project, research was conducted in an effort to assess cultural sensitivity and focus field efforts. This included both published and unpublished materials. The following online resources were reviewed:

- Historic aerial photos and maps
    - http://mil.library.ucsb.edu/ap_indexes/FrameFinder/,
    - http://www.davidrumsey.com/rumsey_collection.kmz,
    - www.historicaerials.com,
    - https://oac.cdlib.org/
    - https://www.loc.gov/collections/sanborn-maps
    - and https://livingatlas.arcgis.com/topoexplorer/index.html
- NRHP (http://www.gelib.com/historic-places-inventory.htm)
- Soil mapping data (https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/)

Field Surveys
On April 29, 2020, a combination of reconnaissance and pedestrian archaeological and historic resource field survey was performed within the City. Survey efforts attempted to relocate potential resources that were generally indicated upon the 1992 General Plan Update for the City. Access to these potential resources was through public roads. The resources' status was determined by the presence/absence of appearance of a potential historic built environment resource, and/or basic level of development and.

Personnel
DUKE CRM Archaeologist Nicholas F. Hearth., M.A. RPA conducted the reconnaissance survey of archaeological and built environment resources, and prepared this report. Mr. Edgar Alvarez, B.A. was the co-author of this report. Paleontologist Benjamin Scherzer, M.S. conducted all paleontological research and prepared the geology, natural setting, and all paleontology sections of this report. Curt Duke, M.A., President and Principal Archaeologist for DUKE CRM oversaw all efforts and contributed to this report.

Mr. Duke meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology; he is also a Registered Professional Archaeologist (RPA) who has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, construction monitoring) since 1994. Mr. Duke holds a Master of Arts degree in Anthropology with an emphasis in archaeology from California State University, Fullerton and a Bachelor of Arts degree in

Anthropology from the University of California, Santa Cruz. Mr. Duke has worked throughout southern and Northern California and parts of Arizona and Nevada.

Mr. Hearth has worked as an archaeologist in cultural resource management since 2002. He meets the Secretary of Interior's Professional Qualifications Standards for Prehistoric Archaeology. He received his B.A. in Anthropology in 2003 from the University of Massachusetts, Amherst, and his M.A. in Anthropology in 2006 from the University of California, Riverside. Mr. Hearth has worked in California, New Mexico and multiple states both in the Midwest and New England. Mr. Hearth is well-versed applying Section 106 of the NHPA, NEPA, and CEQA on a variety of projects across many market sectors. Mr. Hearth has completed projects in all phases of archaeology: Phase I Pedestrian and Shovel Test Surveys, Extended Phase I Survey, Buried Site Testing, Archaeological Sensitivity Assessments, Phase II Testing and Evaluations, Phase III Data Recovery, Phase IV Monitoring, Controlled Demolition, and Native American consultation. His project responsibilities primarily include overseeing archaeological, historical, and paleontological studies, directing all phases of archaeological and historical field and laboratory work, conducting ensuring that the quality of analysis and reporting meets or exceeds appropriate local, state, and federal standards.

Mr. Scherzer holds a Master of Science in Earth Sciences from Montana State University, Bozeman. He has more than 10 years of experience in paleontological research, field surveys, fossil salvage, laboratory identification, report preparation, and curatorial experience. Mr. Scherzer is a member of the Society for Vertebrate Paleontology, Geological Society of America, Society for Sedimentary Geology, and the Paleontological Society.

RESULTS

Paleontological Resources Records Search

The City of Lawndale is underlain by two geologic units. Individual units, and their paleontological sensitivity, are described below.

Old alluvium, undivided (Qoa)

Old alluvium underlies the majority of the Project. It is composed of moderately well-consolidated, poorly-sorted, permeable, slightly dissected gravel, sand, silt, and clay. These sediments were deposited on canyon floors by fluvial activity in the late to middle Pleistocene Epoch (Saucedo et al. 2016).

Old eolian deposits (Qoe)

Old eolian deposits underlie the northwest and southwest corners of the Project. It is composed of poorly consolidated, dense to very dense, well-sorted, fine- to coarse-grained sand and silty sand. These sediments were deposited as eolian coastal dunes in the late to middle Pleistocene (Saucedo et al. 2016) but the dune formation processes are now inactive (Poland et al. 1959).

The climate of Southern California during the Pleistocene was cooler and moister than the modern Mediterranean climate (Lamb 1989). In contrast to the harsh, cold conditions in high latitudes near the ice sheets, Southern California experienced a relatively milder climate during this time (Calder 1983). During this time, the area was inhabited by the familiar Pleistocene or "Ice Age" fauna, such as mammoth, mastodons, horses, camelids, and ground sloths (Stock 2001).

Deposits from the Pleistocene Epoch have not produced any fossil localities within the Project, but have produced two fossil localities within 3 miles:

- The "Mobile Oil Refinery" locality produced cetacean (whale) and *Equus* (horse) material from two miles southeast of the Project (Jefferson 1991b) and
- Locality LACM 2035 produced *Mammuthus columbi* (Columbian mammoth) on 139th St, one mile north of the Project (Miller 1971).

Due to fossil material being previously discovered in deposits from the Pleistocene Epoch in vicinity of the Project, both old alluvium and old eolian deposits have a high paleontological sensitivity at the surface and at depth.

Table 1. Geologic Units and Their Paleontological Potential

Age	Geologic Unit	Fossils Present[1]	Paleontological Sensitivity
Pleistocene	Old alluvium (*Qoa*)	Whale, horse, Columbian mammoth	High at surface and at depth
	Old eolian deposits (*Qoe*)		

Cultural Resources Records Search

Cultural Resources

Results of the records search from the SCCIC and BERD indicate that twelve historic built environment resources are recorded within the City. No prehistoric cultural resources have been documented within the City. These resources are listed in Table 2.

Table 2. Cultural Resources within the City of Lawndale

Primary # or BERD #	Resource Age	Characteristics	Year Recorded	Status
P-19-178543	1972	Single Family Property (HP2) at 16713 Firmona Ave	Unknown	7R
P-19-188892	1959	Educational Building Complex	2010	U
P-19-188893	U	Educational Building Complex	2010	3CS
P-19-190021	U	Commercial Building, 3 stories and under	2012	6Z
481616	1935	Single Family Property at 4724 W 159th St	1993	U
480244	1941	Single Family Property at 4523 W 167th St	1993	U
483066	1939	Single Family Property at 4609 W 167th St	1993	U
483164	1936	4726 W 167th St	1993	U
481694	1935	Multiple Family Property (HP3), 2-4 unit at 4562 W. 172nd St	1993	U
561704	1946	Urban Open Space, Alondra Park, at 3850 Manhattan Boulevard	2003	U
574962	1923	Government Building (HP14), City Hall at 14717 Burin Ave	1997	U
681590	1955	Commercial Building, 3 stories, at 16715 Hawthorne Boulevard	2018	U
NHRP Status Code 3CS: Appears eligible for CR as an individual property through survey evaluation 6Z: Found ineligible for NR, CR or Local designation through survey evaluation 7R: Identified in Reconnaissance Level Survey: Not evaluated. U: Unknown information				

All historic built environment resources are located within the City surrounded by paved asphalt parking lots, commercial buildings, and single-family residential homes. None of the resources were accompanied by any historic archaeological deposits. Nor were any prehistoric cultural resources identified. The records of three built environment resources were provided by the SCCIC, below is a brief description of three of the historic built environment resources within the City.

P-19-188892

Resource P-19-188892 is the Lawndale High School Campus complex. First constructed in 1959, it was built to accommodate the postwar growing population needs of the newly founded City of Lawndale. The core campus consists of an administration building, a cafeteria, classroom buildings, support buildings, athletic fields, and a parking lot (McKenna et al. 2010). The original campus was a series of one- and two-story brick and cinder block buildings with low pitched roofs constructed on concrete pads. Windows consisted of steel framed fixed and casements. The campus complex was recommended not historically significant (McKenna et al. 2010).

P-19-188893

Resource P-19-188893 is the Leuzinger High School complex. It is the earliest high school built in the City in 1930, shortly after the Great Depression. It consisted of a main administration building, a cafeteria, an Olympian gym and a classroom building. It was named in honor of Adolph Leuzinger, who was a member of the Inglewood Union High School District Board of Trustees for 25 consecutive years. The campus was later expanded in 1956 with the addition of a new cafeteria, locker rooms north of the Olympic gymnasium, and classroom buildings 2, 3, 4, and 5 (McKenna el al. 2011). By 1976, a locker room, the Thompson gym, and

classroom buildings 6, 7, and 8 (McKenna et al. 2011) had been added. Leuzinger High School was recommended to be considered a significant cultural resource under CEQA, therefore qualifies as a historical resource eligible for listing in the CRHR. Additionally, it was recommended that any additional alterations or demolition to the Olympic Gymnasium and/or Memorial Garden be avoided while any alterations to the interior of the Main Administration Building be kept to a minimum (McKenna et al. 2011).

P-19-190021

Located in a commercial zone in the City of Lawndale, 16720 Hawthorne Boulevard is a two-story retail building and a 10-vehicle parking lot first constructed in 1947. Designated as Tract 8293, Lot Number 106 and 107, this 6,000 square foot retail building measures roughly 50 feet wide by 105 feet long. Much of the construction is reinforced masonry on a concrete foundation and clad with stucco (Johnson 2012). The building has a flat roof covered with asphalt and gravel. The roof has a stepped parapet and fenestration that consists of an enframed window wall on the front with metal frames that span the length of the building. There are no records of the original site plan or building permit, however, by 1970 a building permit indicates that the building was used for office space by the Mattel Toymakers Federal Credit Union (Johnson 2012). By 2003, building permits show the building was remodeled with the addition of a bathroom, a storefront, and stairs, as well as the demolition of a partition wall. The property does not appear to qualify for the NRHP (Johnson 2012).

Cultural Resource Studies

Based on the research from the SCCIC, five cultural resources studies have been completed in the Project area. Cultural resource studies date from 1991 to the present. Most of these projects relate to upgrading development of a highway, water reclamation and the Leuzinger High School. The bibliography from the SCCIC for cultural resource studies within the City is provided in Appendix C.

Additional Research

Supplemental additional research was conducted referencing online resources of maps, land grants, and aerial photographs. The earliest map of the Lawndale area found during research is a circa 1840s *Diseño del Rancho Sausal Redondo* that depicts a not-to-scale corral, mountain ranges to the west, and a broad flat area for the majority of the diseño (Calisphere 2011). The location of the Project is unclear due to the mapping inaccuracies common with diseño sketches.

General Land Office (GLO) plat maps of the area from original and supplemental survey dating from 1869 was reviewed for historic land ownership information and other pertinent historical locations within the Project (GLO 1869). Most of the Project is within Township 3 south, Range 14 west, and if plotted what would be Sections 21 and 28 though a small portion is in Section 20. The entire Project was plotted as within the *Rancho Sausal Redondo* and no features within the Rancho were mapped. It was noted that "George Harrison's survey of the Sausal Redondo was decided to be the correct survey by the Secretary of the Interior, October 31, 1871". Data was on file for the 1858 Mexican Land Grant Survey and the 1875 State of California Survey, but no plat images were available. No other GLO plat maps were available.

A minimum level of development consisting of widely spaced roads, is indicated in the Project on the 1880 map of the Los Angeles Basin (Rumsey Map 2020). Historic USGS maps of the City date from 1896 through the modern era as late as 1981 (USGS 2020). The following maps were reviewed:

- *Redondo, Calif.* 7.5 minute (1:24,000 scale), 1896;
- *Torrance, Calif.* 7.5 minute (1:24,000 scale), 1924, 1934;
- *Inglewood, Calif.* 7.5 minute (1:24,000 scale), 1950, 1952, 1964, 1972, and 1981;
- *Southern California Map Sheet No. 1.* (1:250,000 scale), 1901, 1904; and
- *Long Beach, California* (1:250,000 scale), 1949, 1957, 1960.

These maps track the growth of the Lawndale area over late 19th through the 20th century. The late 19th and early 20th century maps indicate the area that would later become the City of Lawndale is rural and largely devoid of roads even, except around its borders. The 1924 *Torrance, Calif.* Map covers most of the Project and

indicates that the area is known as Lawndale. Approximately 100 structures including what likely are residences, a school and a rail line are indicated though in essence the area indicate as Lawndale retains a largely rural character. The 1934 version of the same map indicates a greater number of structures, especially in the southern end of the Project, but the rural character is largely retained due to the low density of the development. The single school on this later map shows that it has been moved to the center of town. A single 1938 aerial image (UCSB) indicated an even greater level of development than the 1934 USGS.

By the mid-20th century, USGS maps and many aerial photographs are available to consult (UCSB 2020). Urban levels of development of Lawndale dates to the mid-20th century as show on maps and aerial photography. A major transportation-related development is Highway 405, which is apparent on maps by 1957. The nearly complete urbanization is evident by the 1964 USGS maps.

Cultural Resources Field Survey

On April 29, 2020, a reconnaissance-level overview of the City was conducted by Nicholas F. Hearth of DUKE CRM. Reconnaissance survey consisted of surveying the City to get a general sense of the potential for the historical nature and visits to locations of built environment resources indicated in the previous General Plan (City of Lawndale 1992:Figure B). Revisits to site and resource locations were cursorial in effort. The goal was to determine if the resource was present and if the surrounding area of the resource has been disturbed. Photographs were taken, and field notes were taken to document the findings. The reconnaissance-level survey of the City revealed that land use within Lawndale is predominantly residential though commercial development is also present especially along Hawthorne Boulevard, see Figures 2-4.

A total of 12 built environment resources have been previously recorded within the City and are on-file with the SCCIC and BERD. In the City's (1992:Figure B) General Plan 32 locations of historic structures were indicated. Of these 32 locations, 17 were visited during the field survey, see Table 3, and Figures 5 - 10. The remaining 15 historic structures noted in the 1992 General Plan appear to be removed or are so altered as to be unrecognizable.

Figure 1. Project area overview along Grevellia Avenue, view north.

Figure 2. Project area overview along Hawthorne Boulevard, view south.

Figure 3. Project area overview along Hawthorne Boulevard and West 147th Street, view north.

Table 3. Potential Built Environment Resources Locations Visited during Reconnaissance Survey

BERD #	Address (approximate)	Notes and Condition
N/A	16700 Prairie Ave.	Single family residence (SFR) Extant
N/A	4039 160th St.	SFR, Extant
N/A	4061 159th St.	SFR, Extant
N/A	4061 W. 147th St.	SFR, Extant
N/A	14752 Prairie Ave	SFR, Extant
N/A	14615 Osage Ave.	SFR, Extant
N/A	4118 W. 147th St.	SFR, Extant
N/A	14606 Freeman Ave	SFR, Extant
N/A	NW Corner of 149th and Larch	SFR, likely extant (view obscured)
N/A	14814 Grevillea Ave.	SFR, Extant
N/A	4625 154th St.	SFR, Extant
N/A	4630 154th St.	SFR, Extant
N/A	4555 171st.	SFR, Extant
574962	14717 Burin Ave.	City Hall, Extant
481616	4724 159th St.	SFR, Extant
480244	4523 167th St.	SFR, Extant
681590	16715 Hawthorne Boulevard	Commercial Building, 3 stories, NRHP status 6Y

Figure 4. Single Family Residence at 4039 160th St, view north.

Figure 5. Single Family Residence at 4061 W. 147th St., view northwest

Figure 6. Single Family Residence at 14606 Freeman Ave, view east

Figure 7. Single Family Residence at 4555 171st St., view north

Figure 8. Commercial Building at 16715 Hawthorne Boulevard, view west

Figure 9. City Hall at 14717 Burin Ave, view southwest

RECOMMENDATIONS

The unique environment, events, people, and places of Lawndale have shaped its history, archaeology and paleontology. The traces of these events, people, and places are cultural and paleontological resources that are the physical remains of past activities. DUKE CRM recommends compliance with CEQA that requires a Lead Agency to evaluate if a proposed project would have a significant adverse effect on the environment, including historical resources. CEQA Guidelines pertaining to historical resources (Section 15064.5(b)(1)) state that "A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired". The following recommendations build on the previous goals and policies regarding the treatment of paleontological, archaeological, and historic resources.

Historic Resources

Historic built environment resources are the tangible evidence of past human activity, but are limited to buildings, structures, objects, linear features such as railroads or canals, and other types of earthworks. Twelve built environment resources are recorded at the SCCIC and in the BERD. The City's 1992 General Plan lists 32 historic structures. Through the reconnaissance survey it was determined 17 of the 32 structures are extant, the remaining 15 have either been demolished or are so disturbed so as to be unrecognizable. Four of these 17 were also listed at the SCCIC/BERD bringing the total historic structures recorded in the City to 25. None are listed on the NRHP or CRHR. The following recommendations for built environment resources should be applied to all projects conducted within the jurisdiction of the City of Lawndale.

1. If there is a building/structure that is 50 years or older, it should be evaluated for significance and eligibility for the CRHR.
2. If the building/structure is eligible for the CRHR preservation is the preferred treatment.
3. If preservation is not accomplished, minimization of impacts is recommended.
4. Mitigation of impacts is recommended for any impacts to historical resources,

Archaeological Resources

Archaeological resources are tangible remains of past human activity. These may include prehistoric and historic sites, artifacts, rock art, ruins, features, and landscapes. These nonrenewable resources may yield unique information about past societies and environments, and provide answers for modern day social and conservation problems. Within the City, no archaeological resources are previously recorded. This situation seems highly likely to be a consequence of development occurring prior to the implementation of CEQA, rather than a lack of archaeological sites. The following recommendations for archaeological resources should be applied to all projects conducted within the jurisdiction of the City of Lawndale.

1. The project/property should be reviewed for archaeological sensitivity. This will involve a qualified archaeologist reviewing geology and soils reports and maps, historic maps, and as-built plans of the project/property.
2. The qualified archaeologist should make a recommendation of high, moderate, low, or no sensitivity for archaeological resources.
3. In areas of high sensitivity, buried sites testing is recommended prior to construction. Alternatively, full-time monitoring could be implemented during construction activities. In any event, if an archaeological site is discovered it should be evaluated/excavated to determine significance, this would include artifact analysis, interpretation, and a technical report. If the site is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the site would be required.
4. In areas of moderate sensitivity, part-time monitoring during construction activities is recommended. If an archaeological site is discovered it should be evaluated/excavated to determine significance, this would include artifact analysis, interpretation, and a technical report. If the site is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the site would be required.
5. In areas of low sensitivity, spot-check monitoring during construction activities is recommended. If an archaeological site is discovered it should be evaluated/excavated to determine significance, this would include artifact analysis, interpretation, and a technical report. If the site is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the site would be required.
6. In areas of no sensitivity, no monitoring during construction activities is recommended. If an archaeological site is discovered a qualified archaeologist should be retained to evaluate/excavate the site to determine significance, this would include artifact analysis, interpretation, and a technical report. If the site is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the site would be required.

A qualified archaeologist is a person with a M.A. in anthropology or archaeology (or closely related filed) with at least one year of full-time professional experience in the field of archaeology, who has completed a supervised field school, who possess a demonstrated ability to conduct research to completion, and who maintains one year in a supervisory level in archaeological study; and/or who is a Registered Professional Archaeologist (RPA).

Paleontological Resources

The paleontological resources research indicates that the geologic formations in the City are known to contain paleontological localities with rare, well-preserved fossil materials that offer important information about the plant or animal and/or its evolutionary history. Both formations have been determined to be highly sensitive for paleontological resources. These important resources are most often destroyed as a result of construction, such as excavation, trenching, and tunneling. Impacts can be mitigated through pre-construction and construction mitigation programs. The following recommendations for paleontological resources should be applied to all projects conducted within the jurisdiction of the City of Lawndale.

1. The project/property should be reviewed for paleontological sensitivity. This will involve a qualified paleontologist reviewing geology and soils reports and maps, historic maps, and as-built plans of the project/property.

2. The qualified paleontologist should make a recommendation of high, moderate, low, or no sensitivity for paleontological resources.
3. In areas of high sensitivity, full-time monitoring should be implemented during construction activities. If a paleontological site is discovered it should be evaluated/excavated to determine significance. If it is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the fossil would be required.
4. In areas of moderate sensitivity, part-time monitoring should be implemented during construction activities. If a paleontological site is discovered, it should be evaluated/excavated to determine significance. If it is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the fossil would be required.
5. In areas of low sensitivity, spot-check monitoring should be implemented during construction activities. If a paleontological site is discovered, it should be evaluated/excavated to determine significance. If it is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the fossil would be required.
6. In areas of no sensitivity, no monitoring during construction activities is recommended. If a paleontological site is discovered, a qualified paleontologist should be retained to evaluate/excavate the discovery to determine significance. If it is significant, preservation is the preferred treatment. If preservation is not accomplished, then treatment and/or mitigation of the fossil would be required.

A qualified paleontologist is a person with a B.S. or B.A. in geology, or closely related discipline with an emphasis in paleontology and demonstrated experience and competence in paleontological research, fieldwork, reporting, and curation.

CONCLUSIONS

DUKE CRM has conducted a cultural (archaeological and historical) and paleontological resources assessment for Project for the City, comprising approximately 1,260 acres. The purpose of this report is to inventory the previously recorded paleontological and cultural resources in the City, to assess the potential for impacts to these resources during implementation of the Project. This effort was completed in compliance with the CEQA.

DUKE CRM requested cultural and paleontological records searches. There are at least 12 cultural resources mapped within the City and all are historic built environment resources. No historic or prehistoric archaeological resources have been previously recorded within the City. Additionally, fossil localities have not been recorded in the City. The entire City is underlain by Pleistocene-age alluvium and Pleistocene-age eolian deposits that are considered to have a high sensitivity for paleontological resources due to the discovery of these resources near the City in similar deposits.

DUKE CRM recommends compliance with the resource management regulations in CEQA. Tribal Cultural Resources are recommended to be added to the City's categories of cultural resources which reflect changes to CEQA.

REFERENCES

Arnold, Jeanne E.
1992 Complex Hunter-Gatherer-Fishers of Prehistoric California: Chiefs, Specialists, and Maritime Adaptations to the Channel Islands. *American Antiquity* 57:60-84.

Arnold, Jeanne, and Ann Munns
1994 Independent or Attached Specialization: The Organization of Shell Bead Production in California. *Journal of Field Archaeology* 21:473-489.

Bean, Lowell J. and Charles R. Smith
1978 Gabrielino. In *California*, edited by Robert F. Heizer, pp. 538-549. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Bennyhoff, James A. and Richard E. Hughes
1987 Shell Bead and Ornament Exchange Networks between California and the Western Great Basin. *Anthropological Papers of the American Museum of Natural History* 64:79-175.

Calder, Nigel
1983 *Timescale*. Viking, New York.

Calisphere
2011 *Diseño del Rancho Sausal Redondo, Calif.* Electronic Mexican Period sketch map, http://content.cdlib.org/ark:/13030/hb8h4nb562/?docId=hb8h4nb562&brand=calisphere&layout=printable-details, accessed August 4, 2020.

Chartkoff, Joseph L., and Kerry Kona Chartkoff
1984 *The Archaeology of California*. Stanford University Press, Stanford, California.

City of Lawndale
1992 *City of Lawndale General Plan*. City of Lawndale Planning Department. Lawndale, California.
2020 The History of Lawndale. Electronic Document. http://www.lawndalecity.org./html/history.html, accessed July 14, 2020.

GLO (General Land Office Records)
1869 Original Survey Plat map of Township 3 South, Range 14 West, San Bernardino Base and Meridian. Electronic document https://glorecords.blm.gov/ConvertedImages/Plat_291114_1.PDF, accessed August 5, 2020.

Griffith, Glenn E., James M. Omernik, David W. Smith, Terry D. Cook, Ed Tallyn, Kendra Moseley, and Colleen B. Johnson.
2016 *Ecoregions of California*. Ecoregion map, 1:1,100,000. US Geological Open-File Report 2016-1021. Washington DC.

Hauksson, E.
1990 Earthquakes, faulting, and stress in the Los Angeles Basin. Journal of Geophysical Research 95(B10): 15,365-15,394.

Hoover, Mildred B., Hero E. Rensch, Ethel G.Rensch, William N. Abeloe
1990 *Historic Spots in California.* 4th edition. Stanford University Press, Stanford.

Jefferson, George T.
1991a A Catalogue of Late Quaternary Vertebrates from California: Part One Non-Marine Lower Vertebrate and Avian Taxa. *Technical Reports* No. 5. Natural History Museum of Los Angeles County, Los Angeles.

1991b A Catalogue of Late Quaternary Vertebrates from California: Part Two Mammals: *Technical Reports* No. 7. Natural History Museum of Los Angeles County, Los Angeles.

Johnson, Brent D.
2012 *Site record for P-19-190021*. Heritage Preservation Consultants. Submitted to City of Lawndale. Copies available from South Central Coastal Information Center, Fullerton, California.

Kennett, Douglas J., and James P. Kennett
2000 Competitive and Cooperative Responses to Climatic Instability in Coastal Southern California. *American Antiquity* 65:379–395.

King, Chester D.
1990 Evolution of Chumash Society: A Comparative Study of Artifacts Used for Social System Maintenance in the Santa Barbara Channel Region before A. D. 1804. 1982 PhD dissertation, Department of Anthropology, University of California, Davis. Updated and reprinted, edited by David H. Thomas. Garland Publishing Inc., New York.

Kirkman-Harriman Pictorial and Historic Map of Los Angeles County
1938 Map compiled by George W. Kirkman. Digital version of hand drawn historic map. Available for viewing at the History Department of the Los Angeles Public Library.

Lamb, Richard V.
1989 The Nonmarine Mollusks of Pit 91, Rancho La Brea, Southern California, and Their Paleoecologic and Biogeographic Implications. Master's thesis. Department of Geology, California State University, Northridge.

Los Angeles Conservancy
2020 City of Lawndale municipal historic preservation overview. Electronic document, https://www.laconservancy.org/communities/lawndale, accessed August 4, 2020.

McCawley, William
1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki Museum Press, Banning.

Miller, Wade E.
1971 Pleistocene Vertebrates of the Los Angeles Basin and Vicinity (Exclusive of Rancho La Brea).*Bulletin of the Natural History Museum of Los Angeles County. Science*, No. 10. Los Angeles County Museum of Natural History.

McKenna, Jeanette A.
2010 *Site record for P-19-188892*. McKenna et al. Submitted to The Planning Center. Copies available from South Central Coastal Information Center, Fullerton, California.

McKenna, Jeanette A.
2011 *A Cultural Resources Overview and Architectural Evaluation of the Leuzinger High School Campus, 4118 W. Rosecrans Avenue, Lawndale, Los Angeles Co., California*. McKenna et al. Submitted to The Planning Center. Report number LA-10764. Copies available from South Central Coastal Information Center, Fullerton, California.

Pflugrath, Ron
1999 *Hawthorne Boulevard Specific Plan*. Urban Design Studio/RBF & Associates. Submitted to City of Lawndale, Adopted by Ordinance No. 859-99. Copies available from City of Lawndale.

Poland, Joseph F., Garrett, A.A., and Alien Sinnnott
1959 Geology, hydrology, and chemical character of ground waters in the Torrance-Santa Monica area, California. Geological Survey Water-Supply Paper 1461, 425 p.

Saucedo, George G., Greene, H. Gary, Kennedy, Michael P., and Stephen P. Bezore (compilers)
2016 *Geologic Map of the Long Beach 30'x60' Quadrangle, California*: Geologic map, 1:100,000. California Geological Survey, Sacramento, California.

Raab, Mark L., and Owen D. Larson
1997 Medieval Climatic Anomaly and Punctuated Cultural Evolution in Coastal Southern California. *American Antiquity* 62:319-336.

Rolle, Andrew F.
2003 *California: A History*. Harlan Davidson, Inc. Wheeling, Illinois.

Rumsey Map Collection
2020 Google Earth Rumsey Historical Maps layer. Electronic document, https://www.davidrumsey.com/view/google-earth, date accessed August 5, 2020.

Stock, Chester
2001 *Rancho La Brea: A Record of Pleistocene Life in California*.7th ed. Natural History Museum of Los Angeles County, Los Angeles.

SVP (Society of Vertebrae Paleontology)
2019 Definitions. Paleontological Resources Preservation Act. Electronic resource, http://vertpaleo.org/the-Society/Advocacy/Paleontological-Resources-Preservation-Act.aspx y, accessed October 1, 2019.

USGS
2020 USGS Historical Topographic Map Explorer. Electronic document, https://livingatlas.arcgis.com/topoexplorer/index.html, accessed August 5, 2020.

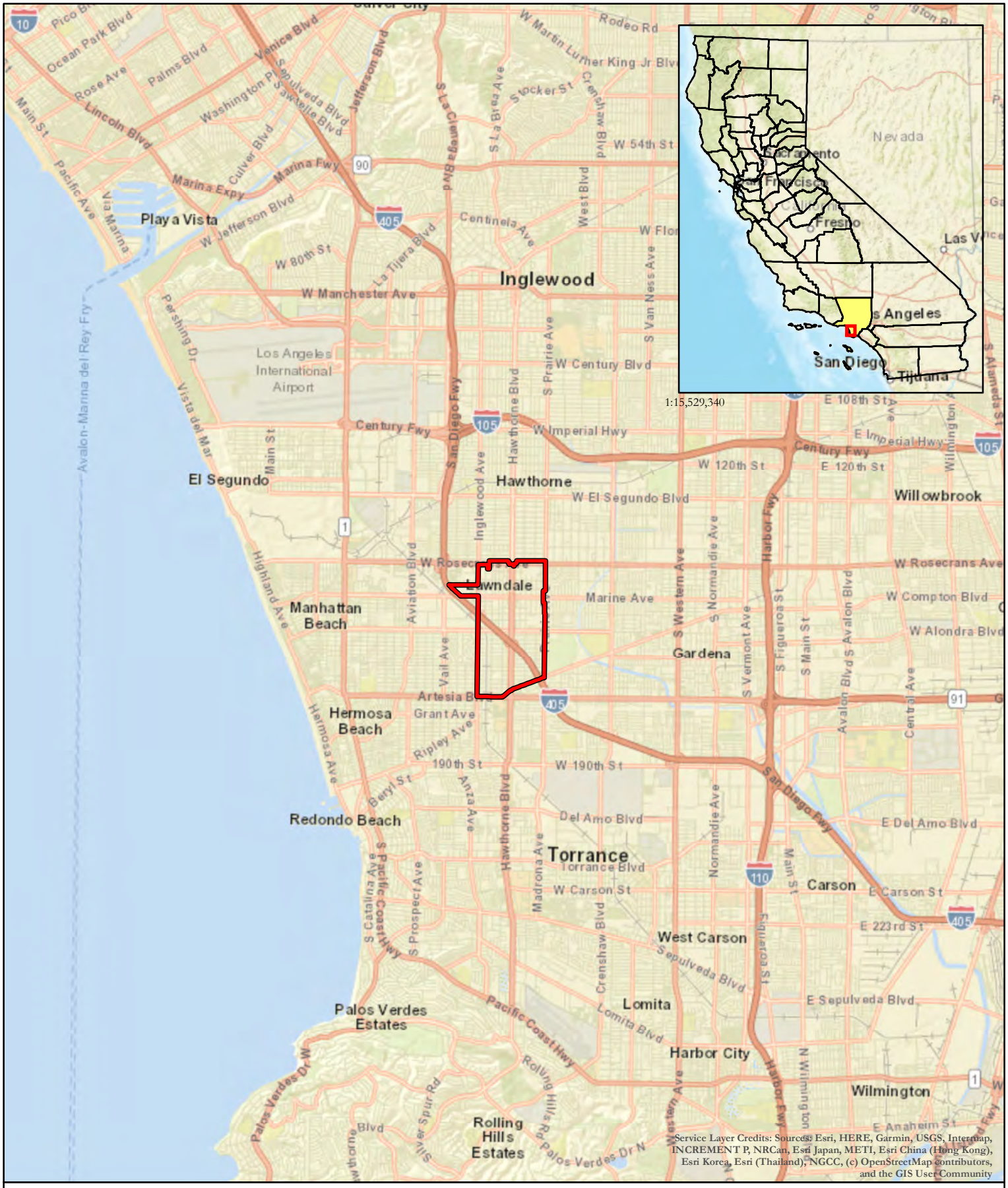
Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 2:214-230.

Warren, Claude N.
1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, pp. 1-14. Eastern New Mexico University Contributions in Anthropology 1(3).

Yerkes, R. F.; McCulloh, T. H.; Schoellhamer, J. E.; and J.G. Vedder
1965 Geology of the Los Angeles Basin, California; an introduction: USGS Professional Paper: 420-A, 57 pp.

Appendix A

Project Maps



City of Lawndale General Plan and Hawthorne Boulevard Specific Plan Update

DUKE CRM Project C-0325

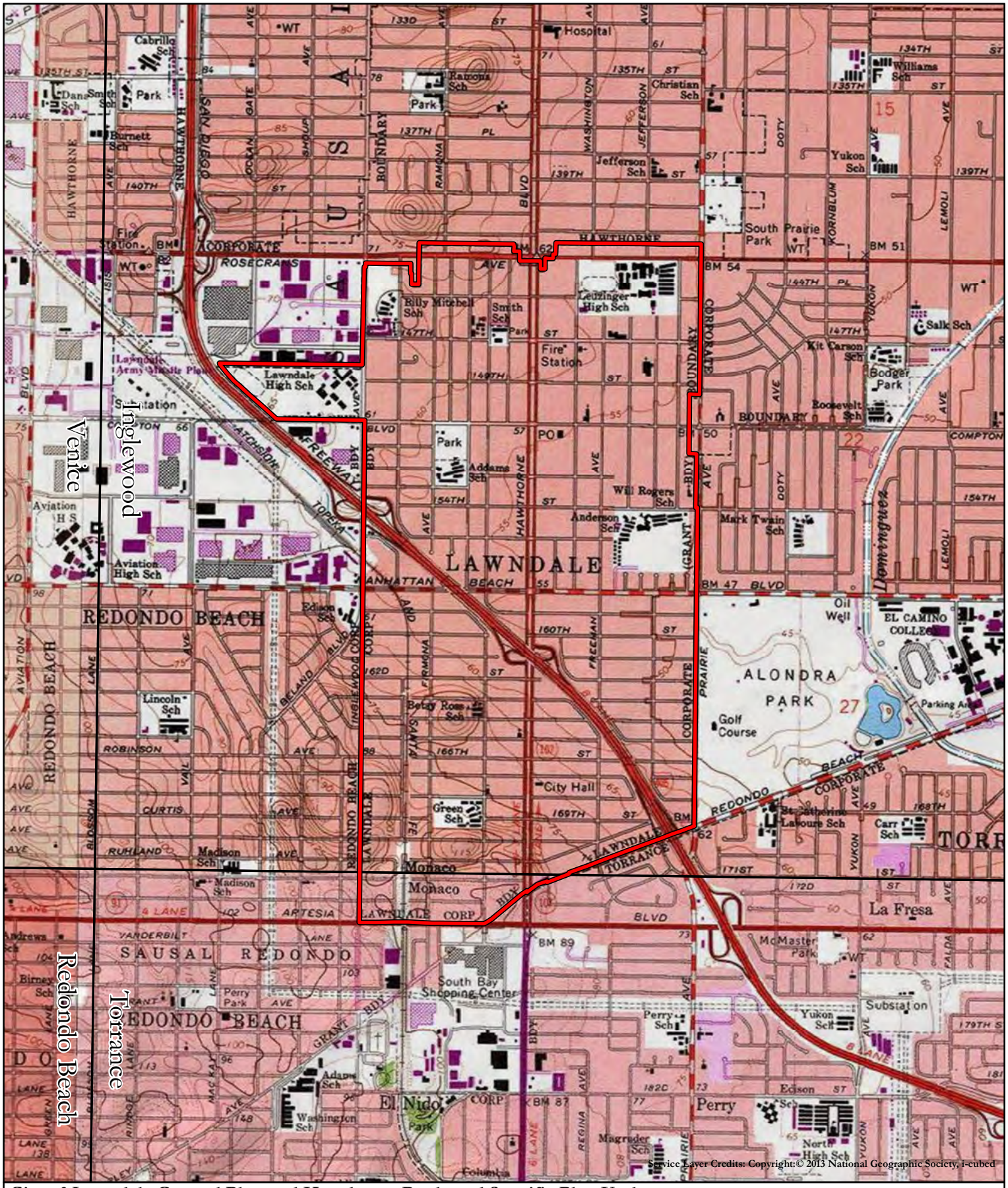
DUKE CRM

Project Area

0 1 2 Miles

N

1 inch = 10,000 feet 1:120,000



City of Lawndale General Plan and Hawthorne Boulevard Specific Plan Update

DUKE CRM Project C-0325

DUKE CRM

Project Area

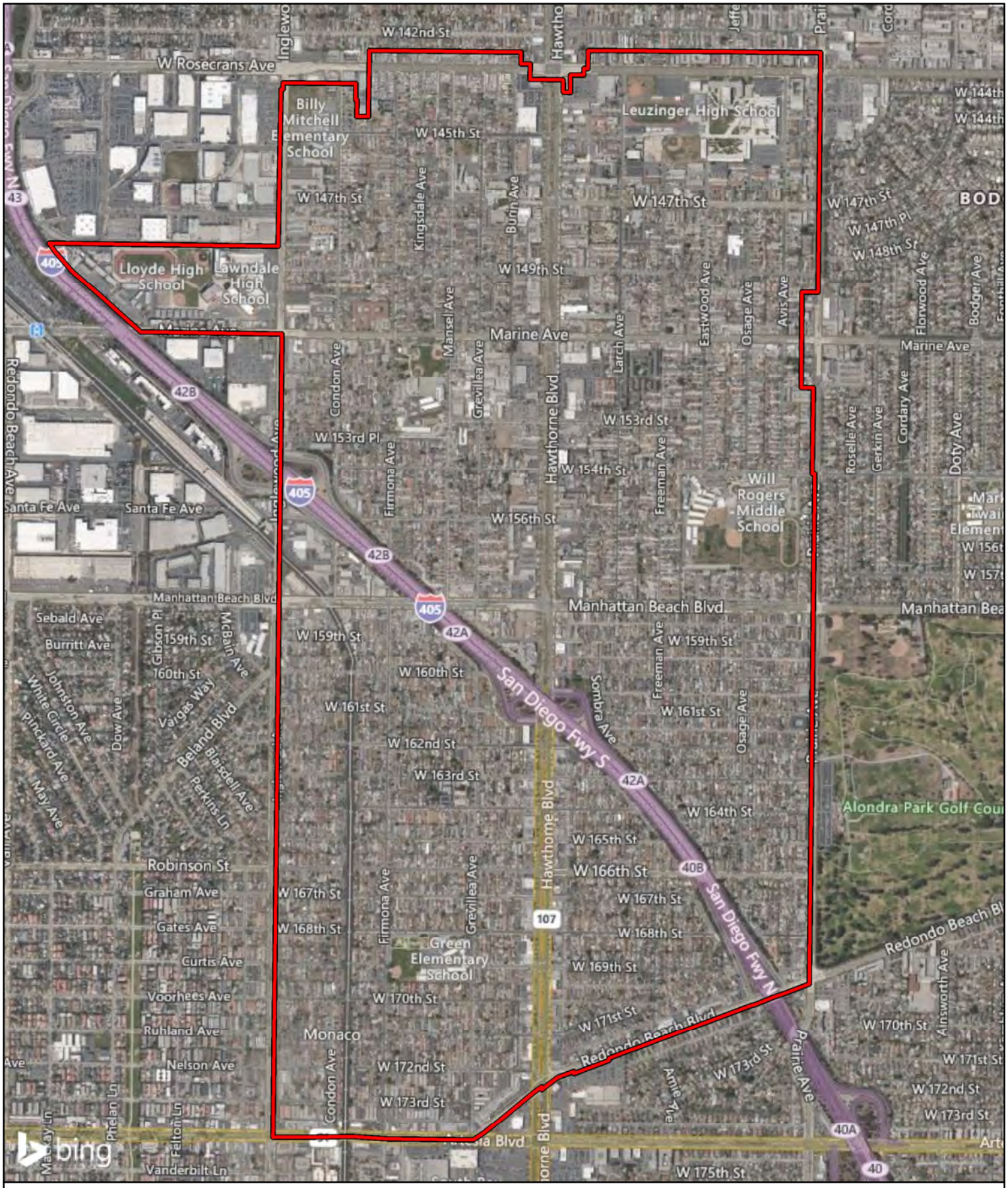
USGS 7.5' Quads

0 0.25 0.5 Miles

0 0.25 0.5 Kilometers

N

1 inch = 2,000 feet 1:24,000



City of Lawndale General Plan and Hawthorne Boulevard Specific Plan Update

DUKE CRM Project C-0325

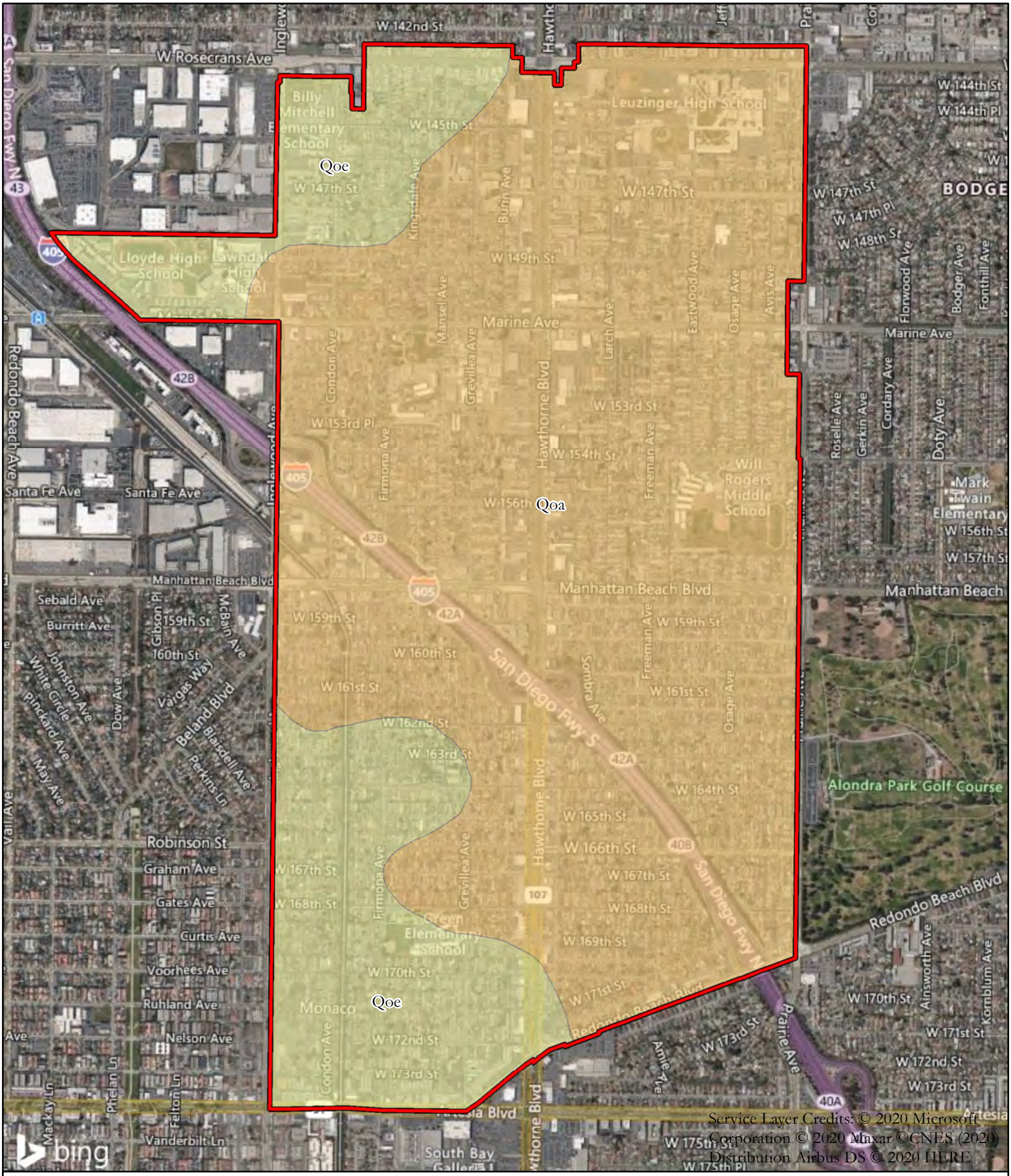
DUKE CRM

Project Area

0 0.125 0.25 Miles

N

1 inch =1,250 feet 1:15,000



Service Layer Credits: © 2020 Microsoft Corporation © 2020 Maxar ©CNES (2020) Distribution Airbus DS © 2020 HERE

City of Lawndale General Plan and Hawthorne Boulevard Specific Plan Update

DUKE CRM Project C-0325

DUKE CRM

Project Area

Geology from Saucedo, et al. (2016):

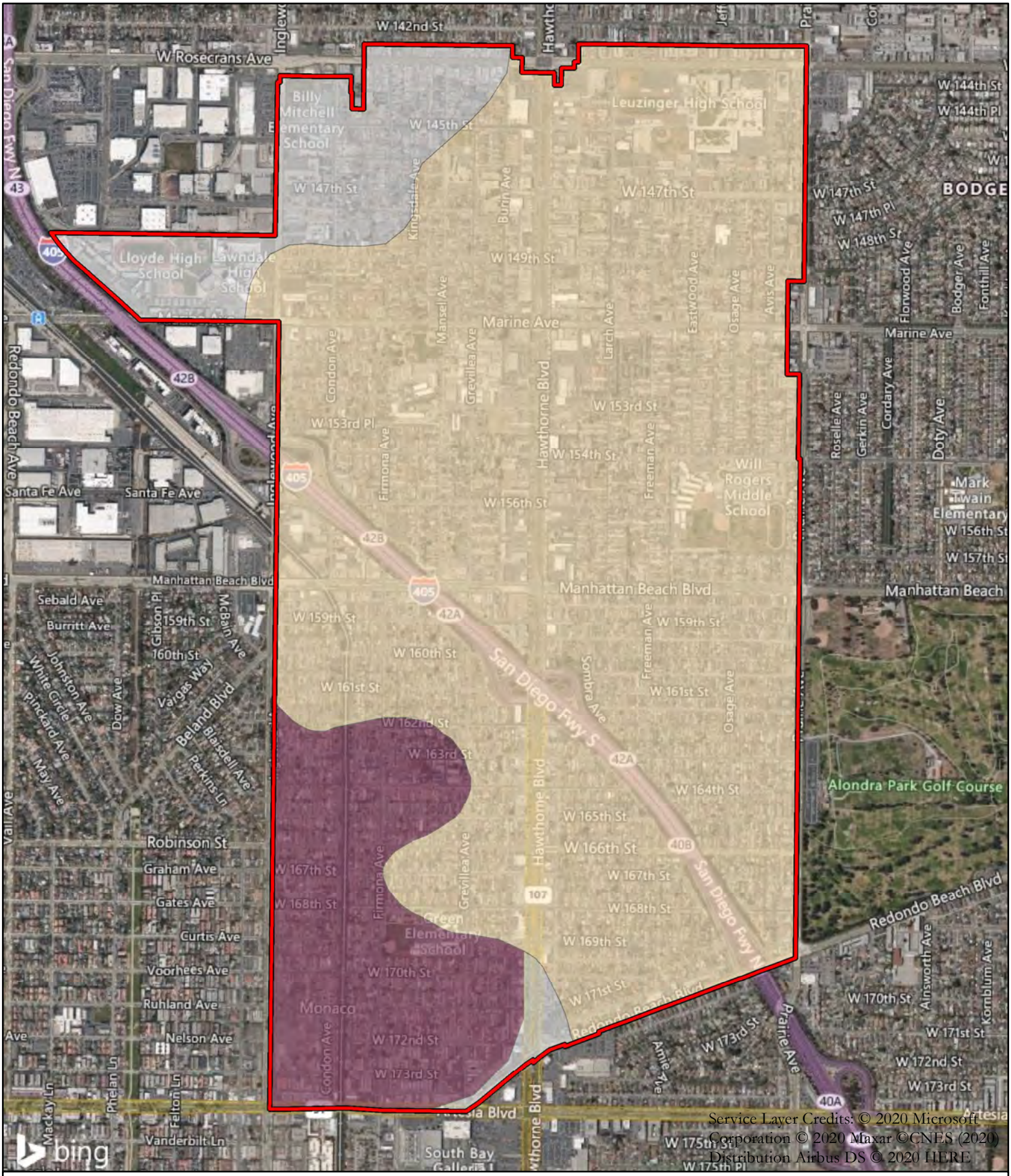
Qoa: Old alluvium

Qoe: Old eolian deposits

0 0.125 0.25 Miles

N

1 inch = 1,250 feet 1:15,000



Service Layer Credits: © 2020 Microsoft Corporation © 2020 Maxar ©CNES (2020) Distribution Airbus DS © 2020 HERE

City of Lawndale General Plan and Hawthorne Boulevard Specific Plan Update

DUKE CRM Project C-0325

DUKE CRM

Project Area

Soil from NRCS Web Soil Survey (2020):

- Urban land-Centinela-Typic Xerorthents
- Urban land-Abaft-Marina complex
- Urban land-Marina complex

0 0.125 0.25 Miles

N

1 inch = 1,250 feet 1:15,000

Appendix B

Resumes

18 Technology Dr., Ste. 103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Curt Duke

President/Principal Archaeologist

Expertise

Cultural Resources Management
California Prehistory
Section 106 Compliance
CEQA Compliance
Native American Consultation

Education

CSU, Fullerton, M.A., Anth, 2006
SDSU, Grad Studies, Anth, 1996-97
UC Santa Cruz, B.A., Anth, 1994

Professional Registrations

RPA, No. 15969
County of Riverside (No. 151)
County of Orange

Professional Memberships

Society for California Archaeology
Society for American Archaeology
Pacific Coast Archaeological Society
Assoc. of Environmental Professionals
Building Industry Association

Professional Experience

President/Principal Archaeologist, DUKE CRM, March 2011 to present
Archaeologist/Principal, LSA Associates, 1997-2011
Archaeological/Paleontological Technician, Various Companies, 1995-97
Archaeological Technician/Teachers Assistant, Cabrillo College, 1994
Anthropological Laboratory Technician, UC Santa Cruz, 1994

Selected Project Experience

Reid/Baldwin Adobe, LA Arboretum, Arcadia, 2019-Present
Veteran Affairs Medical Clinic, Santa Rosa, 2019
Deane Dana Friendship Park, Rancho Palos Verdes, 2019
Makayla Mine Expansion Project, Olancha, 2019
Sweeny Road, Lompoc, 2018
Vantage Point Church, Eastvale, 2016 and 2018
VA West Los Angeles Campus Master Plan, 2017-Present
Avenue S-8 and 40th St. E. Roundabout, Palmdale, 2017-18
SR-110 Improvements, Los Angeles, 2017
Diamond Valley Estates Specific Plan, Hemet, 2017
VA West Los Angeles Campus Hospital Replacement, 2016-Present
Shoemaker Bridge Replacement, Long Beach, 2016-Present
Spruce Goose Hangar, Playa Vista, 2016
Rice Avenue at 5th Street Grade Separation, Oxnard, 2015-Present
Vila Borba, Chino Hills, 2013-Present
Skyridge Residential, Mission Viejo, 2011-Present
Baker Water Treatment Plant, Lake Forest, 2014-2015
VA Clinic, Loma Linda, 2014-Present
Evanston Inn, Pasadena, 2014-2016
Petersen Ranch, Leona Valley, 2013-2014
California Street/Highway 101, Ventura, 2014-Present
6th Street Bridge Replacement, Los Angeles, 2013-Present
I-15/I-215 IC Project, Devore, 2008-10
Colton Crossing Rail-to-Rail Grade Separation, 2008-11
City of LA DPW BOE, On-Call, Cultural/Paleo Services, 2008-11
Mid County Parkway, Riverside County, 2014-10
McSweeny Farms Specific Plan, Hemet, 2004-08
Mesquite Regional Landfill, Coachella Valley, 2006-08
Hacienda at Fairview Valley Specific Plan, Apple Valley2007-08
Majestic Hills Specific Plan, Hesperia, 2006-07
Chuckwalla Solar I Project, Desert Center, 2007-08
Needles Highway Improvement Project, 2004-06
Superstition Solar I Project, Salton Sea, Imperial County, 2008
Muddy Canyon Archaeological Project, Newport Beach, 1997-2001
Temecula 32, Archaeological Phase II Testing, 2007
Mammoth Lakes Parks/Rec and Trail System Master Plan, 2010
24th Street Improvements, City of Bakersfield, 2008-11
California Valley Solar Ranch, San Luis Obispo County, 2009-10
Delano-Alpaugh Water Pipeline, Kern/Tulare Counties, 2006-09
I-15/SR-79 IC Project, Temecula, 2006-10
Westlake Historic Resources Survey, Los Angeles, 2008-09
CETAP, western Riverside County, 1999-2001
Los Coches Creek Elementary School, near Alpine, 2003-06
Oak Valley Specific Plan 1 Amendment, Beaumont, 2004
San Nicolas Island, Naval Base Ventura County, CA, 1997

DUKE CRM

18 Technology Drive, #103
Irvine, CA 92618
949-356-6660
www.dukecrm.com

Brian Glenn

Principal Investigator/Archaeologist

Professional Experience: 30 Years

Expertise

Cultural Resources Management
California Prehistory
Section106 & CEQA Compliance
Native American Consultation
Database (Collections) Management

Education

UCLA , M.A. Anthropology, 1991
UC, Santa Barbara, B.A., Anthropology, 1986
UC, Santa Barbara, B.A., Geography, 1986
San Diego Mesa College, Certificate, GIS, 2010

Professional Registrations

RPA, No. 989903

Professional Memberships

Society for California Archaeology
Society for American Archaeology
San Diego County Archaeological Society President, 1999

Summary of Qualifications

Mr. Glenn has worked on hundreds of cultural resources management projects over his 30 year career. This includes projects throughout California in compliance with Section 106 of the National Historic Preservation Act (NHPA) and California Environmental Quality Act (CEQA). He is listed on the RPA and meets the Secretary of Interior Standards for Principal Investigator. His recent experience includes cultural resources surveys and studies for clients such as the Los Angeles Department of Water and Power, Metropolitan Transit Authority, and La Plaza Foundation. His responsibilities have included the preparation of technical reports (assessment, evaluation, and mitigation), cultural resources management plans and EIS/EIR sections, as well as archaeological monitoring. He has training and significant experience in lithic, faunal, typological and spatial analyses, as well as obsidian source and hydration studies. He has identified, evaluated, and investigated historic era resources from a 1792 Spanish gun emplacement on Ballast Point overlook San Diego Bay to late 19th to mid-20th century household and commercial deposits. Mr. Glenn received B.A. degrees in Geography and Anthropology from UC, Santa Barbara and an M.A. in Archaeology from UCLA. During his graduate work at UCLA, he was acting coordinator of the SCCIC (CHRIS).

Selected Project Experience

First Solar Energy Blythe #1, City of Blythe, CA

Mr. Glenn supervised construction monitoring of the 200-acre solar project in Blythe. CA and prepared the Phase IV report for the County of Riverside. A single historic era dump site was located, recorded and reported.

Hammock Project, SCE, County of Riverside, CA

Conducted a cultural resources assessment of a two-mile section of transmission line in anticipation of upgrades.

Arbor Ridge, Beaumont, CA

Conducted a Phase I cultural resources assessment of a 1,200-acre project area in Beaumont, Riverside County that included historic archives review, pedestrian survey and paleontological literature review for SunCal Development/City of Beaumont.

MWD of Southern California Potholing Project. County of Riverside, CA

Conducted a pedestrian survey of six proposed potholing locations directly adjacent to the Colorado River Aqueduct for the Metropolitan Water District of Southern California.

18 Technology Drive, Ste. 103
Irvine, CA 92618
(949) 356-6660 Ext. 1003
www.dukecrm.com

Nicholas F. Hearth

Principal Investigator/ Archaeologist

Expertise

Cultural Resources Management
California Prehistory
Section106 & CEQA Compliance
Native American Consultation
Lithic Analysis

Education

UC, Riverside, PhD Candidate, Anthropology
UC, Riverside, M.A., Anthropology, 2006
UMass, Amherst, B.A., Anthropology, 2003

Professional Registrations

RPA, No. 989903

Professional Memberships

Society for California Archaeology
Society for American Archaeology
Prehistoric Quarry and Early Mines Interest Group
Coachella Valley Archaeological Society

Professional Archaeological Experience

Principal Investigator, DUKE CRM, March 2018-present.
Field/Laboratory Director, DUKE CRM, 2014-2018.
Associate Archaeologist, Applied EarthWorks, 2012-2014.
Archaeologist, Public Archaeology Laboratory, 2011-2012.
Project Leader, Valles Caldera National Preserve, 2011.
Field Director, Florin Cultural Resource Services, 2010.
Archaeologist, Bighorn Archaeological Consultants, 2009-2010.
Lithic Analyst/Field Supervisor, Northwestern University Archaeology Project, 2007-2009.
Crew Chief, Yalahau Region Human Ecology Proj., 2005-2007.
Report Writer, CRM Tech, 2006.
Field Technician, Yalahau Region Human Ecology Proj., 2004.
Field/Laboratory Technician, Public Archaeology Survey Team, 2003-2004.
Laboratory Director/Laboratory Assistant/Field Technician, UMass Archaeological Services, 2002-2003.

Selected Project Experience*

Reid-Baldwin Adobe, LA Arboretum, Arcadia, 2019 – present
SR 57-60 IC and Golf Course, Diamond Bar, 2019 - present
Makayla Mine Expansion Project, Olancha, 2019
PCH Signal Improvements, Malibu, 2019 – present
Ocean Place (Tract 17425), Seal Beach, 2018 - present
1st over Glendale, Los Angeles, 2018 - 2019
Diamond Valley Estates Residential, Hemet, 2017 - present
SBCTA 210/Pepper, Rialto, 2016-2019
Vila Borba Residential, Chino Hills, 2015-present
California Street, Ventura, 2014-present
Skyridge Residential, Mission Viejo, 2014-present
26426 National Trails Highway, Helendale, 2018
City of Redlands TTM20126, 2018
Vanderham Monitoring, Jurupa Valley 2017-2018
Trumark-Higgins Monitoring, Chino Hills, 2017
Mission Heritage, Riverside, 2017
76 Station, Orange, 2016
Vantage Point Church, Eastvale, 2016
Rancho Mirage Resignalization, 2015-2016.
Rice Avenue at 5th St., Grade Separation, Oxnard, 2015-2018
Lakeside Temescal Valley Residential Development, 2014-2016
Tracy Hills Specific Plan, 2015
Clinton Keith Road Expansion, Murrieta, 2014
Mission Hills Reservoir, Indio, 2013
Regent Crossroads, Winchester, 2013
Crowder Canyon Arch. District Data Recovery Plan, 2013
San Gabriel Trench Archaeological Project, 2013
I10/Jefferson St. Interchange Improvement, 2012-2013
PG&E TCS Remediation, Needles, 2012 to 2014
Old Place Neck Data Recovery, Staten Island, NY. 2012
Jackson Flat Data Recovery Kanab, UT, 2009-2010
**Complete project experience available upon request*

18 Technology Drive, Ste. 103
Irvine, CA 92618
(949) 356-6660
www.dukecrm.com

Edgar Alvarez

GIS Analyst/ Archaeologist

Years Experience: 5 Years

Years with DUKE CRM: 2 Months

Expertise

Cultural Resources Management
California Prehistory
Section106 & CEQA Compliance
Native American Consultation
GIS Analysis

Education

CSU, Northridge, B.A., Anthropology, Minor in GIS, 2016
PCIAP, Catalina Island Field School, 2015

Professional Memberships

Society for California Archaeology
Society for American Archaeology

Selected Project Experience

PCH Signal Systems Project, Malibu, 2020
Indian Wells General Plan, 2020
Lawndale General Plan, 2020
Mokelumne Aqueducts Tunnel, Stockton, 2020
Sunnymead Car Wash, Moreno Valley, 2020
Vernola Marketplace Project, Jurupa Valley, 2020
Bluff Street Reservoir Project, Norco, 2020
Purple Line Extension (Westside Subway), L.A., 2018 - 2019
Southern California Edison (SCE) EC L.A., 2018 - 2019
Rincon Band of Luiseno Indians Survey, SD, 2018 - 2019
Purple Line Extension 2 (Rodeo Subway), Beverly Hills, 2020
El Centro International Border Wall, El Centro, 2020
SOCAL Gas Pipeline, Seal Beach, 2020
(LAWA) Terminal 1.5 Project, L.A., 2018 - 2 019
Desert Trails Preparatory Project, Victorville, 2019
Florence Mills Apartments Project, L.A. , 201 9
Ridge Development Project, Penryn, 2019
31801 Pacific Coast Highway Project, Malibu, 2018
Boyle Heights Sports Center Gym Project, L.A., 20 18
Cold Canyon Landfill Expansion, Arroyo Grande, 2018
Daggett Solar Farm Project, Daggett, 2018
Roosevelt Park Stormwater Capture Project, L.A., 2018
Ava Hollywood Mixed Use High-Rise Project, L.A., 2018
Corona Affordable Housing Project, L.A., 2018
Elk Creek Bridge Studies (TO 31), Lake Mendocino, 2019
Carlotta Curve Improvement (TO 56), Lake Mendocino, 2019
Three Bridges Replacement (TO 57), Lake Mendocino, 2019
South Eel River Bridge Seismic (TO 6 0), Lake Mendocino, 2019
Gualala Shoulders and Rumble (TO 62), Lake Mendocino, 2019
State Route 132 West Freeway, Modesto, 2020
CBP Road Improvements, El Centro, 2019
Yuma International Border Wall, Yuma, 2020
LAX Police Station, Inglewood, 2019
Ladera Park Storm Water Capture, L.A., 2019
Gates Canyon Storm Water Capture, Calabasas, 2020
PG&E Irrigation Line, Pismo Beach, 2020
Deep Soil Mixing Project, Malibu, 2020
CBP Chula Vista INT Border Wall, Chula Vista, 2020
SCE Woolsey Fire, Malibu, 2018

18 Technology Drive, Suite 103
Irvine, CA 92618
(949) 356-6660 Ext 1005
www.dukecrm.com

Benjamin Scherzer

Paleontologist

Expertise

Paleontological Resources Management
Fossil excavation
Fossil preparation
Stratigraphy
Natural gas mudlogging
Directional drilling

Education

M.S., Earth Science, 2008, MSU, Bozeman, MT
B.A., Geology/Math, 2002, Earlham College, IN

Professional Registrations

Paleontologist, County of Orange
Paleontologist, County of Riverside

Professional Memberships

Society of Vertebrate Paleontology
Geological Society of America
Society for Sedimentary Geology
American Association of Petroleum Geologists, Pacific Section
South Coast Geological Society
Western Association of Vertebrate Paleontologists

Publications and Professional Papers

Scherzer, B. 2017. A possible physeteroid (cetacea: odontoceti) from the Yorba member of the Puente Formation, Orange County, California.

Scherzer, B. 2016. An archaic baleen whale (Cetacea: Mysticeti) from the Vaqueros Formation, and other fossil material from the Skyridge Project, Orange County, California.

Scherzer, B. 2015. Miocene teleost fish from Chino Hills: preliminary results from the Vila Borba Project, San Bernardino County, California.

Professional Experience

Paleontologist, DUKE CRM, February 2014-present
Paleontologist, VCS Environmental, 2020-present
Paleontologist, Rincon Consultants, 2020-present
Paleontologist, Red Tail Environmental, 2020-present
Paleontologist, L&L Environmental, 2017-2018
Stratigrapher, Archeological Resource Management Corp., 2015-2018
Paleontological Specialist II, SD Natural History Museum, 2013-2018
Paleontological Specialist II, SWCA (Pasadena), 2012-2015
Paleontologist, SWCA (Vernal, UT), 2011-2012
Fossil Preparator, Carter County Museum, 2010-2011
Physical Science Technician, Badlands National Park, 2010
Mudlogger/Geologist, Pason Systems USA, 2006-2009
Paleontological Field Assistant, ARCADIS US, 2006-2007

Selected Project Experience

210 Mixed Flow Lane Addition, Highlands, 2020-present
Reid-Baldwin Adobe, Arcadia, 2019-present
San Jacinto GP & Update, San Jacinto, 2019-present
I-5 Widening, Aliso Viejo, 2018-2020
Sweeny Rd, Lompoc, 2018-2020
Atlanta Avenue Widening, Huntington Beach, 2018-present
Ocean Place, Seal Beach, 2018-present
Lake Forest Civic Center, Lake Forest, 2018-present
Vanderham Monitoring, Jurupa Valley, 2017-2018
Gold Flora Farms, Desert Hot Springs, 2017-2019
I-5 HOV Truck Lanes, Santa Clarita, 2017-2018
Brasada Homes, San Dimas, 2017-2018
Indus Light Industrial Building, Chino Hills, 2017-2018
Murrieta's Hospitality Commons, Murrieta, 2017-2019
6th Street Viaduct, Los Angeles, 2017-present
I-15 TEL, Riverside and San Bernardino Counties, 2017
Lewis Street, Anaheim, 2017
The Crossings, Chino Hills, 2016-2017
Reata Glen, Mission Viejo, 2016-2018
Greenville-Banning Channel, Costa Mesa, 2016
Diamond Valley, Hemet, 2017
Marywood Residential, Orange, 2016-2017
Rancho Mission Viejo, Mission Viejo, 2015-2018
Santa Margarita Water District Tesoro Reservoirs, Mission Viejo, 2015
Evanston Inn, Pasadena, 2015
Sycamore to Peñasquitos 230 kV Transmission Line, San Diego, 2015
Lakeside Temescal Valley, Temescal Valley, 2015-2020
Vila Borba, Chino Hills, CA, 2013-present
RP-Outfall Relocation, Ontario, 2014
Serrano Ridge, Temescal Valley, 2014
Lago Los Serranos, Chino Hills, 2014
Baker WTP, Lake Forest, 2014
Skyridge Residential, Mission Viejo, 2014-present
Pacific Highlands, San Diego, 2014
Sol y Mar, Ranchos Palos Verdes, 2013-2014
Mojave Solar Power, Hinkley, 2013
Genesis Solar Energy, Blythe, 2012-13

Appendix C

Cultural Resource Study Bibliography

Report #	Authors	Year	Title
LA-02499	McKenna, Jeanette A.	1991	Results of a Standard Prehistoric Archaeological Records Check, City of Redondo Beach, Los Angeles County, California - General Plan Eir
LA-02904	Stickel, Gary E.	1993	Draft Report a Phase I Cultural Resources Literature Search for the West Basin Water Reclamation Project
LA-05499	Smith, Philomene C.	2000	Negative Archaeological Survey Report: to Cold Plane the Existing Pavement on Route 405 and Overlay With 30mm of Rubberized Asphalt Concrete at Selected On/off-ramps From Vermont Ave. to Manchester Blvd.
LA-06013	Maki, Mary K.	2002	Community/civic Center Construction Project, City of Lawndale
LA-06236	Sylvia, Barbara	2002	Highway Project on Route 405 Between Crenshaw Blvd. and Manhattan Beach Blvd. in Torrance and Lawndale in Los Angeles County
LA-08777	Bonner, Wayne H.	2006	Cultural Resources Records Search and Site Visit Results for T-mobile Candidate La03471d (bollinger Gym), 4110 West 154th Street, Lawndale, Los Angeles County, California
LA-10132	Johnson, Ken	1965	Fun, Frustration and Fulfillment an Historical Study of the City of Redondo Beach
LA-10333	McKenna, Jeanette M.	2009	A Brief Historic Context Statement Prepared for the General Plan Update: The City of Torrance, Los Angeles County, California
LA-10764	McKenna, Jeanette	2011	A Cultural Resources Overview and Architectural Evaluation of the Leuzinger High School Campus, 4118 W. Rosecrans Avenue, Lawndale, Los Angeles County, CA
LA-10765	McKenna, Jeanette	2010	A Cultural Resources Overview and Architectural Evaluation of the Lawndale High School Campus, 14901 S. Inglewood Avenue, Lawndale, Los Angeles County, CA
LA-11767	Johnson, Brent	2012	Direct APE Historic Architectural for AT&T Mobility, LLC, 405 Fwy/Redondo Beach Blvd. 16720 Hawthorne Boulevard, Lawndale, CA
LA-12571	O'Neil, Stephen and Black, Megan	2014	Archaeology Survey Report In Support of the Huitt-Zollars Inglewood Avenue Corridor Widening Project, City Lawndale, Los Angeles County, California

Appendix E: Noise Impact Study

General Plan Update
Noise Impact Study
City of Lawndale, CA

Prepared for:

De Novo Planning Group
180 East Main St., #108
Tustin, CA 92780

Prepared by:

MD Acoustics, LLC
Claire Pincock, INCE-USA
Rachel Edelman
1197 Los Angeles Ave, Ste C-256
Simi Valley, CA 93065

Date: 7/12/2023

TABLE OF CONTENTS

1.0 Introduction 1
- 1.1 Purpose of Analysis and Study Objectives 1
- 1.2 Site Location and Project Area 1
- 1.3 Proposed Project Description 1
- 1.4 General Plan Update Buildout Assumptions 2

2.0 Fundamentals of Noise 7
- 2.1 Sound, Noise, and Acoustics 7
- 2.2 Frequency and Hertz 7
- 2.3 Sound Pressure Levels and Decibels 7
- 2.4 Addition of Decibels 7
- 2.5 Human Response to Changes in Noise Levels 8
- 2.6 Noise Descriptors 9
- 2.7 Tonal Sounds 10
- 2.8 Sound Propagation 10
- 2.9 Ground Absorption 11
- 2.10 Sound Attenuation 11

3.0 Ground-Borne Vibration Fundamentals 14
- 3.1 Vibration Descriptors 14
- 3.2 Vibration Perception 16
- 3.3 Vibration Propagation 16

4.0 Regulatory Setting 17
- 4.1 Federal Regulations 17
- 4.2 State Regulations 19
- 4.3 City of Lawndale 20

5.0 Study Method and Procedure 30
- 5.1 Noise Measurement Procedure and Criteria 30
- 5.2 SoundPLAN Noise Modeling 30
- 5.3 FHWA Traffic Noise Prediction Model 31

6.0 Existing Noise Environment 33
- 6.1 General Land Use Noise 33
- 6.2 Noise Measurements 33
- 6.3 Existing Noise Modeling 36
- 6.4 Existing Vibration Sources in the Project Area 39

7.0 Future Noise Environment, Impacts, and Mitigation 40
- 7.1 Transportation Noise and Vibration 40
- 7.2 Stationary Noise 46
- 7.3 Construction Noise 46
- 7.4 Groundborne Vibration 48

8.0 CEQA Analysis 50
9.0 References 52

LIST OF APPENDICES

Appendix A: SoundPLAN Data
Appendix B: Noise Measurement Data and Field Sheets
Appendix C: FHWA Roadway Noise Worksheets

LIST OF EXHIBITS

Exhibit A: Plan Area 3
Exhibit B: Existing General Plan Land Use Map 4
Exhibit C: Proposed General Plan Land Use Map 5
Exhibit D: Proposed General Plan Land Use Change Map 6
Exhibit E: Typical Ground-borne Vibration Levels 15
Exhibit F: Existing Noise and Land Use Compatibility 22
Exhibit G: Proposed Noise and Land Use Compatibility 27
Exhibit H: Noise Measurement Location Map 35
Exhibit I: Existing Roadway Noise Level Contours (CNEL) 38
Exhibit J: 2045 No Project Noise Contours (CNEL) 44
Exhibit K: 2045 With Project Noise Contours (CNEL) 45

LIST OF TABLES

Table 1: General Plan Update Growth Assumptions 2
Table 2: Decibel Addition 7
Table 3: Typical Noise Levels 8
Table 4: Perceived Changes in Noise Levels 9
Table 5: Noise Reduction Afforded by Common Building Construction 12
Table 6: Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration 14
Table 7: FHWA Design Noise Levels 18
Table 8: Roadway Noise Modeling Parameters 31

Table 9: Vehicle Mix Data 32
Table 10: Short-Term Noise Measurement Summary 33
Table 11: Long-Term Noise Measurement Summary 34
Table 12: Existing Exterior Noise Levels Along Roadways 36
Table 13: FTA Ground-Borne Vibration Impact Criteria for General Assessment 40
Table 14: 2045 No Project Traffic Noise Levels (dBA, CNEL) 41
Table 15: 2045 Plus Project Traffic Noise Levels (dBA, CNEL) 42
Table 16: Change in Noise Along Roadways (dBA, CNEL @ 50') 43
Table 17: Typical Construction Noise Levels 47
Table 18: Vibration Source Levels for Construction Equipment 48
Table 19: Guideline Vibration Damage Potential Threshold Criteria 49

1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This noise assessment was prepared to evaluate the potential noise impacts for the Project Area and to recommend noise mitigation measures, if necessary, to minimize the potential noise impacts. The assessment was conducted and compared to the noise standards set forth by the Federal, State, and Local agencies. Consistent with the City's Noise Guidelines, the Project must demonstrate compliance to the applicable noise criterion as outlined within the City's existing Noise Element and proposed Public Safety Element and Municipal Code.

The following is provided in this report:

- A description of the Project Area and the proposed Project
- Information regarding the fundamentals of noise and vibration
- A description of the local noise and vibration guidelines and standards
- An analysis of traffic noise impacts to and from the project site
- An analysis of stationary noise impacts to and from the project site
- An analysis of construction noise impacts
- An analysis of ground-borne vibration impacts to and from the project site
- Suggested mitigation measures to reduce impacts

1.2 Site Location and Project Area

The City of Lawndale is located in the South Bay area of Los Angeles County, approximately 10 miles southwest of downtown Los Angeles. The City is approximately 1.9 square miles (1,241 acres) and is bounded by the City of Hawthorne to the north and west, by unincorporated areas of Los Angeles County and the City of Gardena to the east, by the City of Torrance to the south, and by the City of Redondo Beach to the south and west. Regional access to the City is provided by Interstate 405, a major north-south highway which provides access to Lawndale and the greater Los Angeles region.

The General Plan Update Study Area, as shown in Exhibit A, includes the entire City limits (approximately 1,241 acres) as well as the City of Lawndale's Sphere of Influence (approximately 314 acres); the entire Study Area is approximately 1,555 acres.

1.3 Proposed Project Description

The City of Lawndale is preparing a comprehensive update to its existing General Plan. The updated Lawndale General Plan is expected to be adopted in 2023 and will guide the City's development, growth, and conservation through land use objectives and policy guidance. The General Plan Update is intended to be an expression of the community's vision for the City and Study Area, and constitutes the policy and regulatory framework by which future development projects will be reviewed, and public improvements will be implemented. The City will implement the General Plan Update by requiring development, infrastructure improvements, and other projects to be consistent with its policies and by implementing the actions included in the General Plan Update.

This report will aid in the development of the noise portion of the Public Safety Element of the General Plan Update. The Public Safety Element establishes goals, policies, and actions to protect the community from risk associated with geologic, fire, and flood hazards, as well as setting standards for emergency preparedness. The Public Safety Element supports the City's participation in the Lawndale Local Hazard Mitigation Plan, the County of Los Angeles All-Hazards Mitigation Plan, and the Lawndale Climate Action Plan. This Element also addresses the required topics related to noise, including standards and policies to protect the community from the harmful and annoying effects of exposure to excessive noise levels. This Element includes strategies to reduce land use conflicts that may result in exposure to unacceptable noise levels.

1.4 General Plan Update Buildout Assumptions

Buildout of the General Plan could yield a total of up to 15,405 housing units, a population of 47,430 people, approximately 5.35 million square feet of non-residential building square footage, and 9,208 jobs within the Planning Area. As shown in Table 1, this represents development growth over existing conditions of up to approximately 3,942 new housing units, 9,482 people, 808,864 square feet of new non-residential building square footage, and 738 jobs.

The analysis of the General Plan Update is based on various assumptions regarding existing and future conditions in Lawndale. Unless otherwise stated, the assumptions are as specified in Table 1, which are based on the General Plan 2045 Buildout.

Table 1: General Plan Update Growth Assumptions

Description	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs
Existing Conditions (2022)	11,463	38,948	4,542,162	8,470
2045 General Plan	15,405	47,430	5,351,026	9,208
Net Change	+3,942	+9,482	+808,864	+738

Exhibit A

Plan Area

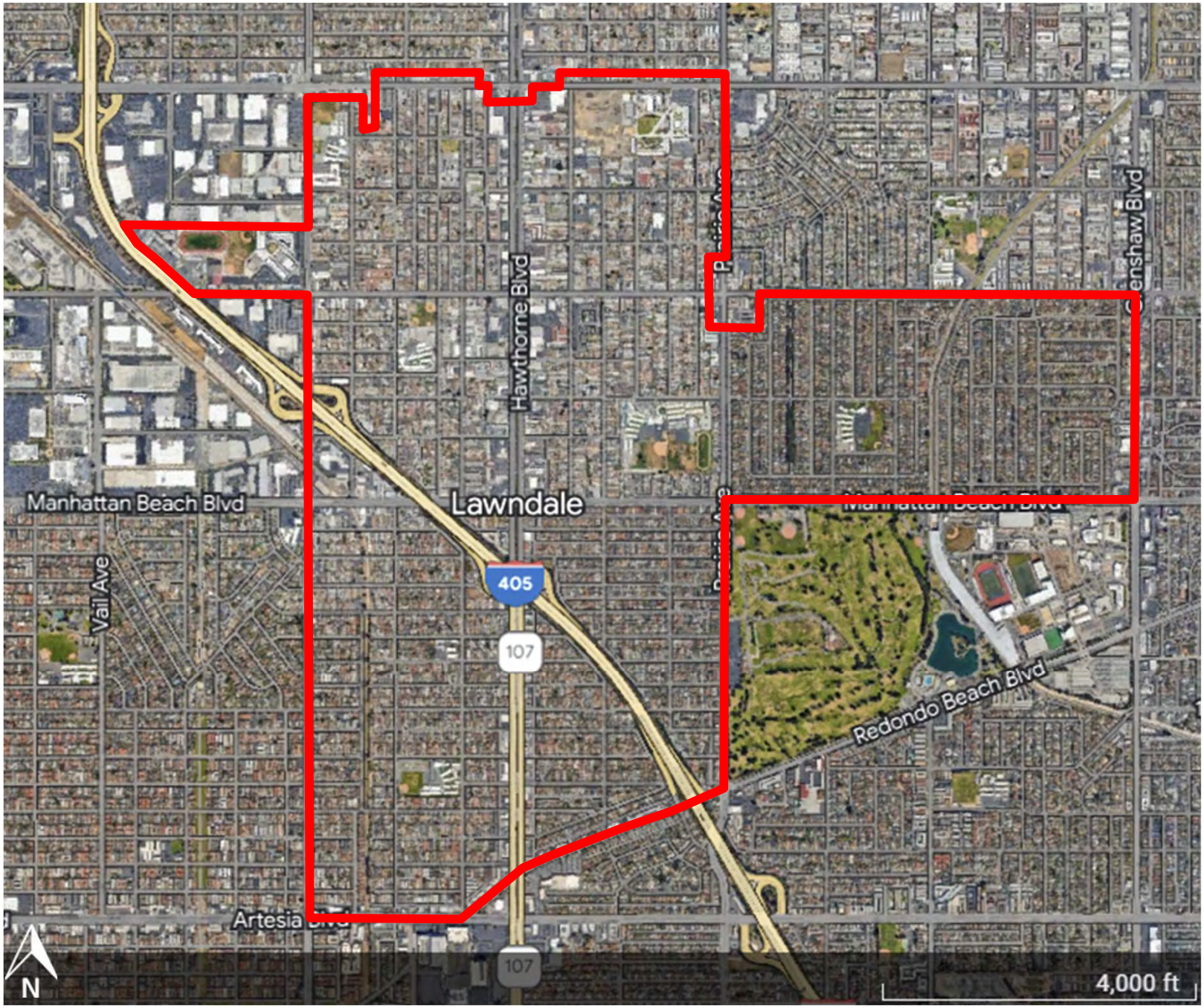


Exhibit B

Existing General Plan Land Use Map

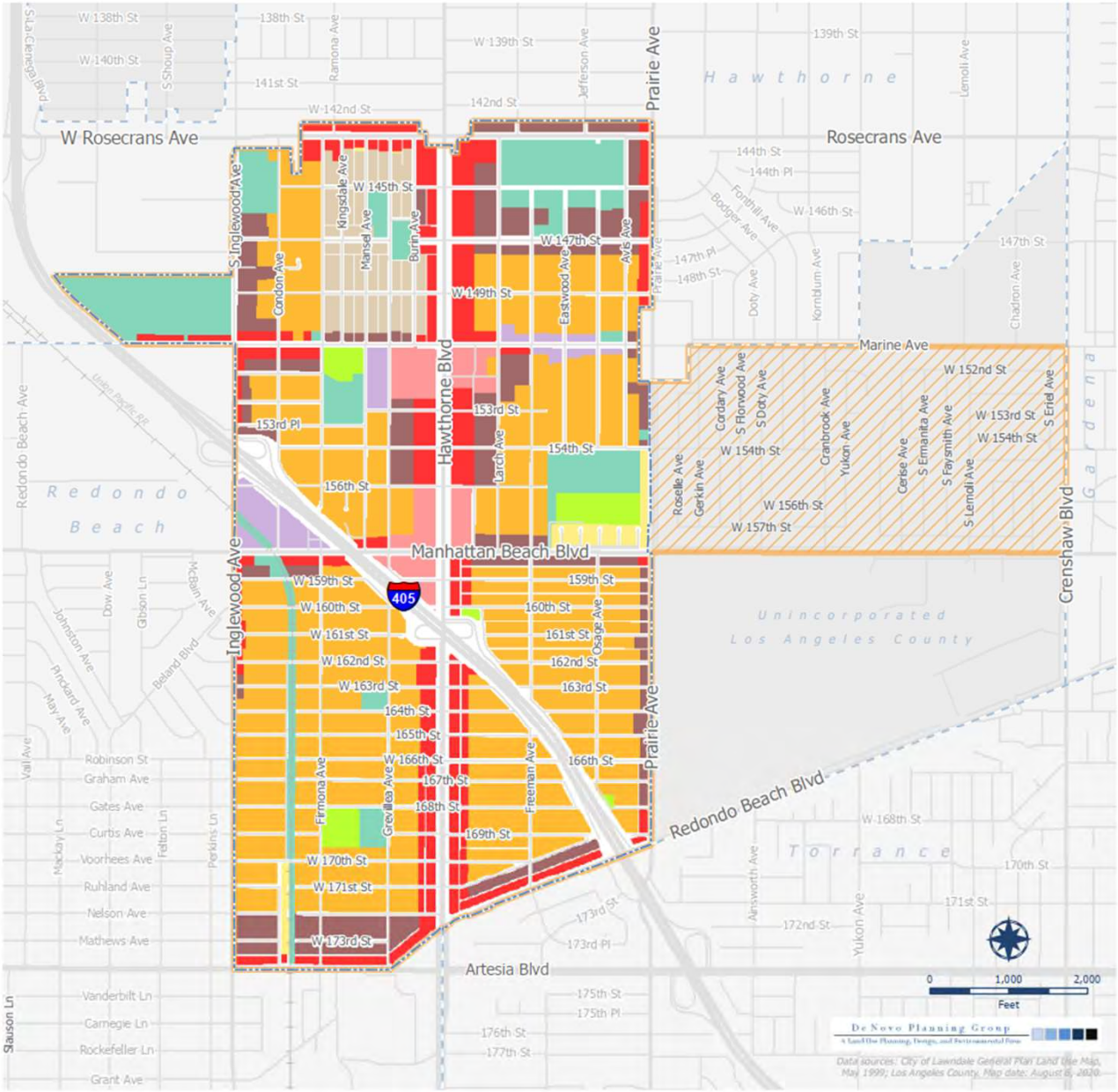


Figure 2-2.

Current General Plan Land Use Map

LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area/Sphere of Influence
- Surrounding Jurisdiction
- Unincorporated Los Angeles County

General Plan Land Use

- Commercial
- Downtown Commercial
- Industrial
- Open Space
- Public Facilities/Schools
- Residential Multiple Family Low
- Residential Multiple Family Medium
- Residential Single Family Low
- Residential Single Family Medium

City of Lawndale
The heart of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

Data sources: City of Lawndale General Plan Land Use Map, May 1999; Los Angeles County. Map date: August 6, 2020.

Exhibit C

Proposed General Plan Land Use Map

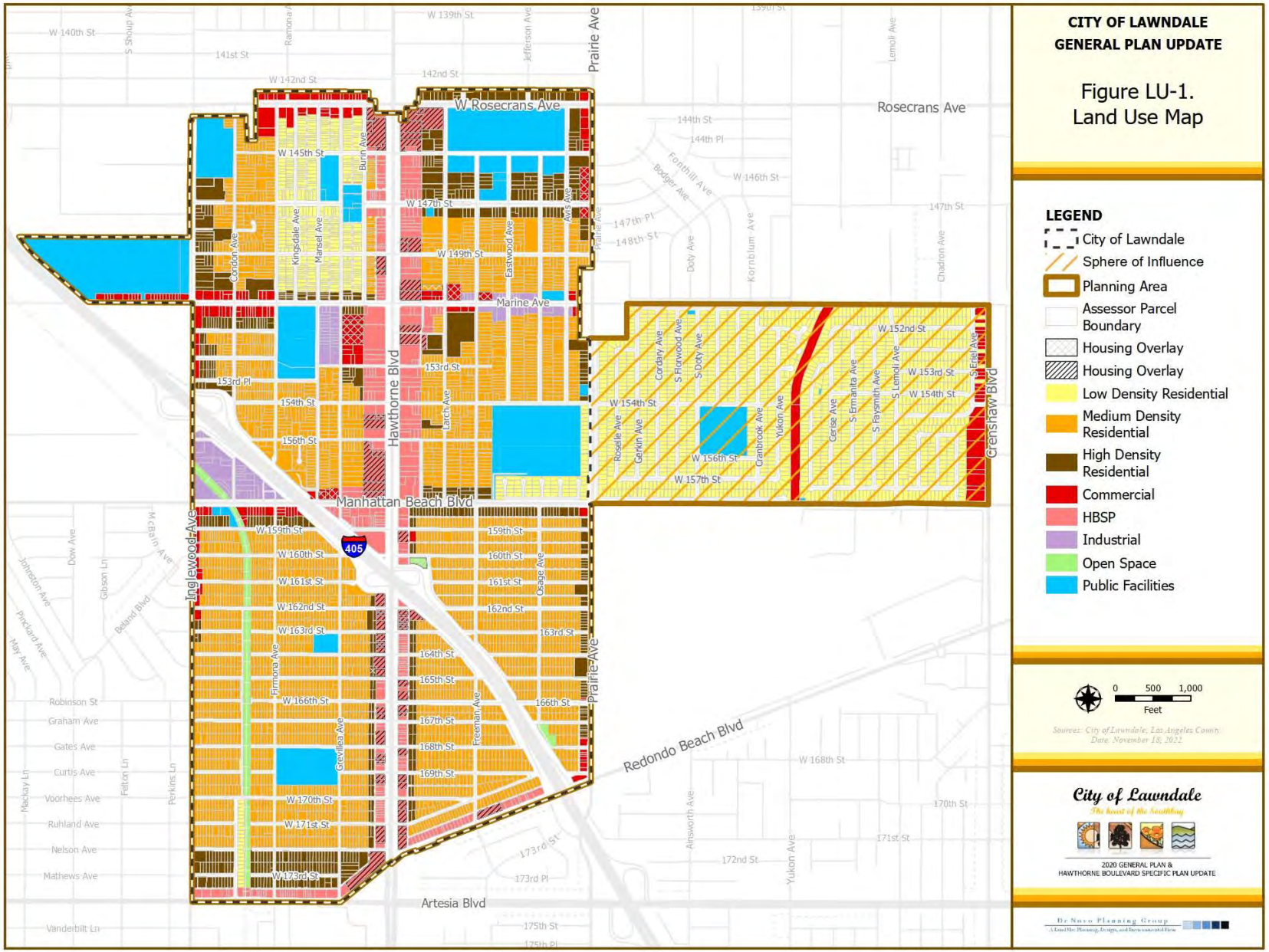
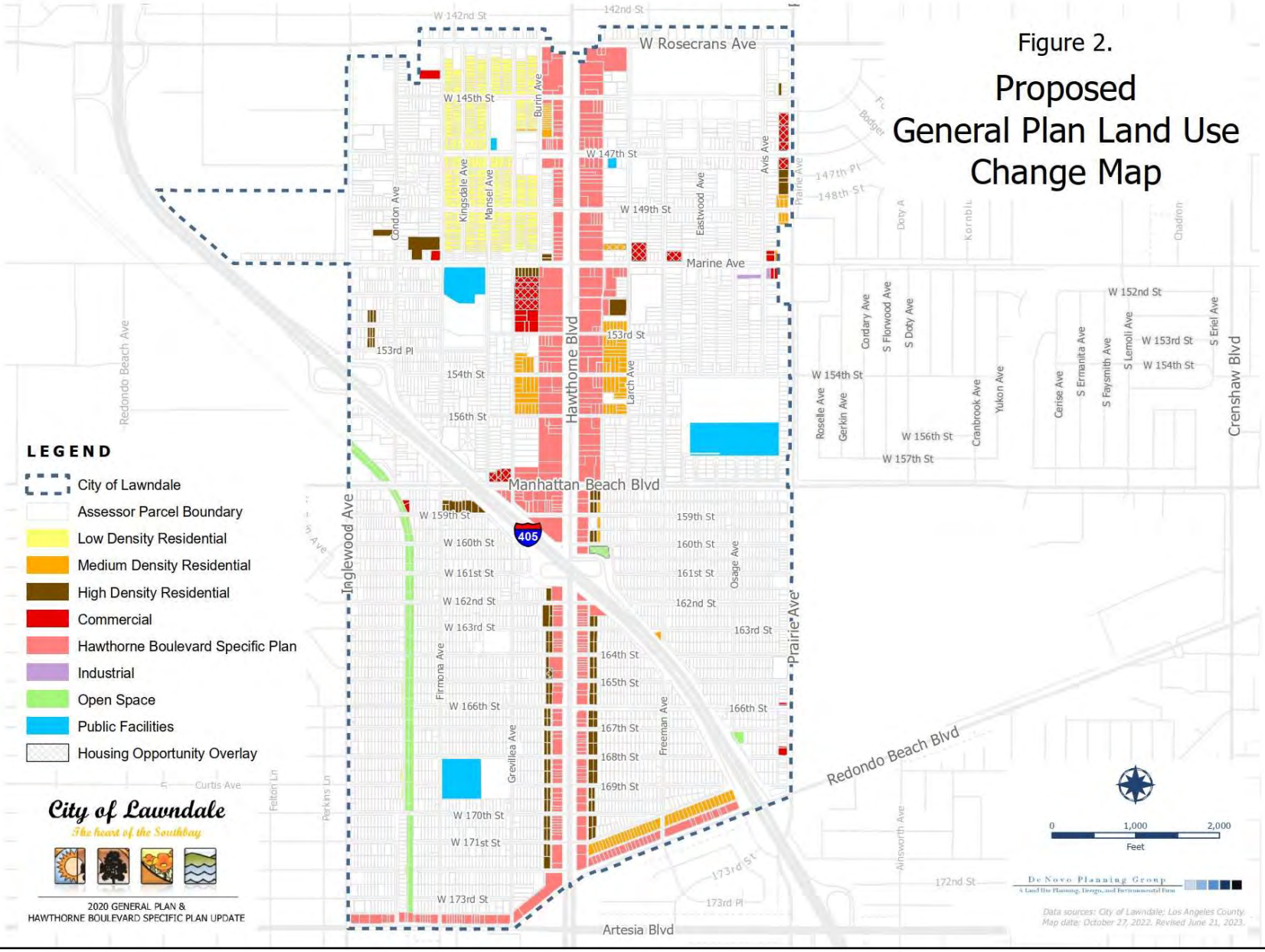


Exhibit D

Proposed General Plan Land Use Change Map



2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

2.1 Sound, Noise, and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting at 20 Hz to the high pitch of 20,000 Hz.

2.3 Sound Pressure Levels and Decibels

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square meter ($\mu N/m^2$), also called micro-Pascal (μPa). One μPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels abbreviated dB.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the single SPL. In other words, sound energy that is doubled produces a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound. When combining sound levels, estimates shown in Table 2 may be utilized.

Table 2: Decibel Addition

When Two Decibel Values Differ by:	Add This Amount to Higher Value	Example
0 or 1 dB	3 dB	70+69=73 dB
2 or 3 dB	2 dB	74+71=76 dB
4 to 9 dB	1 dB	66+60=67 dB
10 dB or more	0 dB	65+55=65 dB
Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013		

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, A-scale weighting is typically used and is reported in terms of the A-weighted decibel (dBA). The A-scale was designed to account for the frequency-dependent sensitivity of the human ear. Typical A-weighted noise levels are shown in Table 3.

Table 3: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor
	110	Rock Band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large Business Office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcasting/recording studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013.

In general, the human ear can barely perceive a change in the noise level of 3 dB. As shown in Table 4, a change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

Table 4: Perceived Changes in Noise Levels

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud
Source: Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. Caltrans, 2013.	

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, and others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after the addition of ten (10) decibels to sound levels in the night between 10:00 PM and 7:00 AM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dBA: A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the California Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking, or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90, L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dBA level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

2.7 Tonal Sounds

A pure tone sound is a sound produced at or near a single frequency. Laboratory tests have shown that humans are more perceptible to changes in sound levels of a pure tone. For a noise source to contain a "pure tone," there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to "stand out" against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contagious one-third octave bands by 5 dB for center frequencies of 500 Hertz (Hz) and above; by 8 dB for center frequencies between 160 and 400 Hz; and by 15 dB for center frequencies of 125 Hz or less.

2.8 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The

sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet or more from a noise source. Wind, temperature, air humidity, and turbulence can further impact have far sound can travel.

2.9 Ground Absorption

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt, or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

2.10 Sound Attenuation

Noise-related land use issues are typically composed of three basic elements: (1) the noise source, (2) a transmission path, and (3) a receiver.

The appropriate acoustical treatment for a given project should consider the nature of the noise source and the sensitivity of the receiver. When the potential for a noise-related problem is present, either avoidance of the noise-related problem or noise control techniques should be selected to provide an acceptable noise environment for the receiver while remaining consistent with local aesthetic standards and practical structural and economic limits. Fundamental noise control options are described below.

2.10.1 Noise Barriers

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. To achieve that reduction, the barrier must be high enough and long enough to block the line-of-sight of the vehicles on the road. A noise barrier can still achieve a 5 dBA noise level reduction when it is tall enough to barely allow a line-of-sight of the vehicles. A noise barrier is most effective when placed close to the noise source or receiver. When the noise barrier is an earthen berm instead of a wall, the noise attenuation can be increased by another 3 dBA.

2.10.2 Setbacks

Noise exposure may be reduced by increasing the setback distance between the noise source and the receiving use. Setback areas can take the form of open space, frontage roads, recreational areas, and storage yards. The available noise attenuation from this technique is limited by the characteristics of the noise source but generally ranges between 4 and 6 dBA.

2.10.3 Site Design

Buildings can be placed on a property to shield other structures or areas affected by noise and to prevent an increase in noise levels caused by reflections. The use of one building to shield another can significantly reduce overall noise control costs, particularly if the shielding structure is insensitive to noise. An example would be placing a detached garage nearest the noise source to shield the house or backyard. Site design should guard against creating reflecting surfaces that may increase onsite noise levels. For example, two buildings placed at an angle facing a noise source may cause noise levels within that angle to increase by up to 3 dBA. The open end of U-shaped buildings should point away from noise sources for the same reason. Landscaping walls or noise barriers located within a development may inadvertently reflect noise to a noise-sensitive area unless carefully located.

2.10.4 Building Facades

When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through the acoustical design of building facades. Standard construction practices provide a noise reduction of 10–15 dBA for building facades with open windows and a noise reduction of approximately 25 dBA when windows are closed (Table 5). An exterior-to-interior noise reduction of 25 dBA can be obtained by requiring that building design include adequate ventilation systems, which would allow windows facing a noise source to remain closed, even during periods of excessively warm weather.

Where greater noise reduction is required, acoustical treatment of the building facade may be necessary. Reducing relative window area is the most effective control technique, followed by providing acoustical glazing (e.g., thicker glass or increased air space between panes) within frames with low air infiltration rates, using fixed (i.e., non-movable) acoustical glazing, or eliminating windows. Noise transmitted through walls can be reduced by increasing wall mass (e.g., using stucco or brick in lieu of wood siding), or isolating wall members by using double or staggered stud walls, while noise transmitted through doorways can be lessened by reducing door area, using solid-core doors, or sealing door perimeters with suitable gaskets. Noise-reducing roof treatments include using plywood sheathing under roofing materials.

Table 5: Noise Reduction Afforded by Common Building Construction

Construction Type	Typical Occupancy	General Description	Range of Noise Reduction (dB)[1]
1	Residential, Commercial, Schools	Wood frame, stucco, or wood sheathing exterior. Interior drywall or plaster. Sliding glass windows, with windows partially open.	15-20
2	Same as 1 above	Same as 1 above, but with windows closed.	25-30
3	Commercial, Schools	Same as 1 above, but with fixed 0.25-inch plate glass windows.	30-35
4	Commercial, Industrial	Steel or concrete frame, curtain wall, or masonry exterior wall. Fixed 0.25-inch plate glass windows.	35-40
Source: California Airport Land Use Planning Handbook, 2002.			

2.10.5 Landscaping

While the use of trees and other vegetation is often thought to provide significant noise attenuation, approximately 100 feet of dense foliage – with no visual path extending through the foliage – is required to achieve a 5 dBA attenuation of traffic noise. Thus, the use of vegetation as a noise barrier is not considered a practical method of noise control unless large tracts of dense foliage are part of the existing landscape.

Vegetation can be used, however, to acoustically "soften" intervening ground between a noise source and a receiver, increasing ground absorption of sound, and thus, increasing the attenuation of sound with distance. Planting trees and shrubs also offers aesthetic and psychological value, and it may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels would be largely unaffected.

3.0 Ground-Borne Vibration Fundamentals

3.1 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors, where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and mainly exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. Several different methods are used to quantify vibration amplitude. Typical human reaction and effect on buildings due to ground-borne vibration is shown in Table 6. Exhibit E illustrates common vibration sources and the human and structural responses to ground-borne vibration.

PPV – Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS – Known as root mean squared (RMS) can be used to denote vibration amplitude

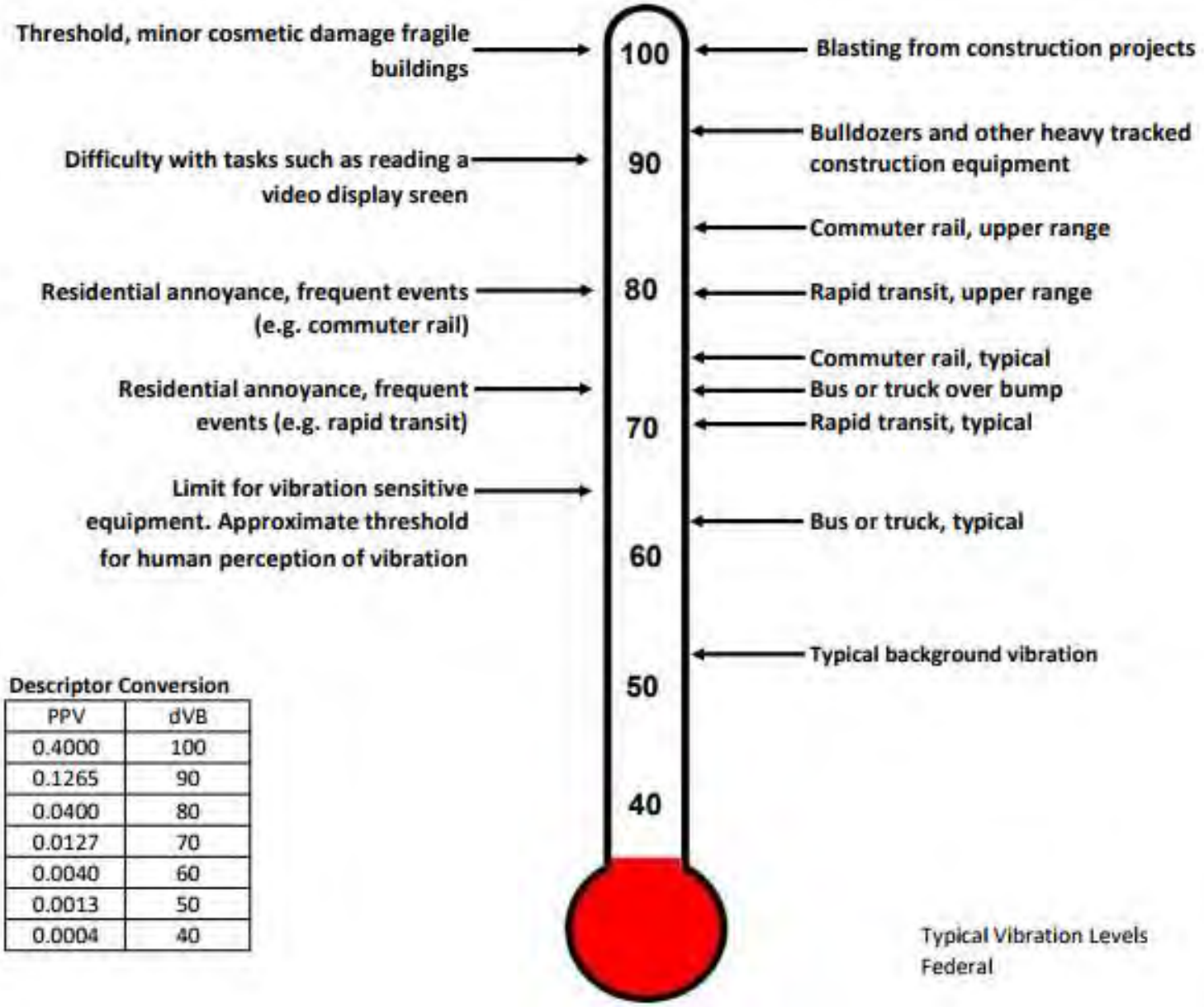
VdB – A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

Table 6: Typical Human Reaction and Effect on Buildings Due to Ground-Borne Vibration

Vibration Level Peak Particle Velocity (PPV)	Human Reaction	Effect on Buildings
0.006–0.019 in/sec	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08 in/sec	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10 in/sec	Level at which continuous vibration begins to annoy people	Virtually no risk of “architectural” (i.e., not structural) damage to normal buildings
0.20 in/sec	Vibrations annoying to people in buildings	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6 in/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage
Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2020.		

Exhibit E

Typical Ground-Borne Vibration Levels



Descriptor Conversion

PPV	dVB
0.4000	100
0.1265	90
0.0400	80
0.0127	70
0.0040	60
0.0013	50
0.0004	40

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

The California Department of Transportation has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and although the Project is not subject to these regulations, it serves as useful tools to evaluate vibration impacts. (California Department of Transportation, 2020).

3.3 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation. As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. This drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 Regulatory Setting

The proposed Project is located in the City of Lawndale, and noise regulations are addressed through the efforts of various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

4.1.1 Noise Control Act of 1972

The Federal Office of Noise Abatement and Control (ONAC) was originally tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows:

- The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies.
- The Federal Aviation Agency (FAA) regulates noise from aircraft and airports.
- The Federal Highway Administration (FHWA) regulates noise from the interstate highway system.
- The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers.

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being constructed adjacent to a highway or that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement Codes and land use planning.

The intent of a General Plan Noise Element or Section is to set goals to limit and reduce the effects of noise intrusion and to set acceptable noise levels for varying types of land uses. To this end, the City has the authority to set land use noise standards and restrict private activities that generate excessive or intrusive noise. However, it should be recognized that the City does not have the authority to regulate all sources of noise within the City and various other agencies may supersede City authority. The following is a summary of some federal agency requirements that apply to noise within the Project Area.

4.1.2 Federal Highway Administration

Federal Highway Administration State routes and freeways that run through the City are subject to Federal funding and, as such, are under the purview of the Federal Highway Administration (FHWA). The FHWA has developed noise standards that are typically used for Federally funded roadway projects or projects that require either Federal or Caltrans review. These noise standards are based on Leq and L10 values and are included in Table 7, FHWA Design Noise Levels.

Table 7: FHWA Design Noise Levels

Activity Category	Description of Category	Design Noise Levels[1]	
		Leq (dBA)	L10 (dBA)
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Examples include natural parks or wildlife habitats.	57 (exterior)	60 (exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (exterior)	70 (exterior)
C	Developed lands, properties, or activities not included in Categories A or B, above.	72 (exterior)	75 (exterior)
D	Undeveloped lands.		
E	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (interior)	55 (interior)

Source: FHWA Noise Standard. 23 Code of Federal Regulations 772.
Notes: Either Leq or L10 (but not both) design noise levels may be used on a project.

U.S. Department of Housing and Urban Development

The Department of Housing and Urban Development (HUD) issues formal requirements related specifically to standards for exterior noise levels along with policies for approving HUD-supported or assisted housing projects in high noise areas. In general, these requirements established three zones. These include:

- 65 dBA Ldn or less - an acceptable zone where all projects could be approved,
- Exceeding 65 dBA Ldn but not exceeding 75 dBA Ldn - a normally unacceptable zone where mitigation measures would be required, and each Project would have to be individually evaluated for approval or denial. These measures must provide 5 dBA of attenuation above the attenuation provided by standard construction required in a 65 to 70 dBA Ldn area and 10 dBA of attenuation in a 70 to 75 dBA Ldn area, and
- Exceeding 75 dBA Ldn - an unacceptable zone in which projects would not, as a rule, be approved.

4.1.3 The Federal Interagency Committee on Noise

The Federal Interagency Committee on Noise (FICON) developed guidance for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies of the percentage of persons highly annoyed by aircraft noise. These recommendations are often used for different types of environmental noise such as traffic noise. A readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact

when the noise criteria for a given land use is exceeded. In areas where the existing noise levels range from 60 to 65 dBA Ldn, a 3 dBA barely perceptible noise level increase is considered significant. When the existing noise levels already exceed 65 dBA Ldn, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact since it likely contributes to an existing noise exposure exceedance.

4.2 State Regulations

4.2.1 California Department of Health Services

The California Department of Health Services (DHS) Office of Noise Control studied the correlation between noise levels and their effects on various land uses. As a result, the DHS established four categories for judging the severity of noise intrusion on specified land uses. These categories are presented in the State Land Use Compatibility for Community Noise Exposure table (California Office of Noise Control, 2017).

4.2.2 The California Building Code

Section 1206.4 of the 2022 California Building Code (Cal. Code Regs., Title 24, Part 2), Chapter 12 (Interior Environment), establishes an interior noise criterion of 45 dBA CNEL in any habitable room. Per California Building Code, Chapter 2 (Definitions), a habitable space is A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces. This section applies to dwelling and sleeping units.

4.2.3 California Green Building Standards Code

California Green Building Standards Code (2022), Chapter 5 (Non-residential Mandatory Measures) Section 5.507.4 (Acoustical Control), applies to all proposed buildings that people may occupy but are not residential dwelling units, with the exception of factories, stadiums, storage, enclosed parking structures, and utility buildings.

Buildings must comply with Section 5.507.4.1 or Section 5.507.4.2. Section 5.507.4.1 requires wall and roof-ceiling assemblies exposed to the noise source making up the building, or addition envelope or altered envelope, shall meet a composite Sound Transmission Class (STC) rating of at least 50 or a composite Outdoor to Indoor Transmission Class (OITC) rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when within the 65 CNEL noise contour of an airport, freeway, expressway, railroad, industrial source, or fixed-guideway source. If contours are not available, buildings exposed to 65 dB Leq(h) must meet a composite STC rating of at least 45 or OITC of 35 with exterior windows of at least STC 40 or OITC 30. Section 5.507.4.2 requires that the interior noise attributable to exterior sources must not exceed 50 dBA Leq(h) during any hour of operation. Section 5.507.4.3 requires that assemblies separating tenant spaces from tenant spaces or public places must have an STC of at least 40.

4.3 City of Lawndale

Existing planning policies and noise regulations applicable to noise within the City of Lawndale are presented in the Noise Plan of the City of Lawndale General Plan 1992 and within the City of Lawndale Municipal Code. Applicable goals, policies, and regulations are presented below.

4.3.1 City of Lawndale General Plan 1992

General Plan Goals, Policies and Actions
The 1992 General Plan Noise Plan includes the following goals, policies and implementation programs that are intended to avoid or reduce noise impacts related to transportation, stationary, and construction related noise sources.

Noise Goal 1: To achieve and maintain an environment which is free from excessive or harmful noise through identification, control and abatement.

Policies
Policy 1a: Control and abate undesirable sounds through the development of land use compatibility guidelines and a noise ordinance.
Policy 1b: Encourage the development of industrial and commercial land uses which do not produce excessive noise.
Policy 1c: Discourage development of noise sensitive land uses in area impacted by high noise levels.
Policy 1d: Ensure that sensitive land uses are not subjected to inappropriate noise levels resulting from transportation systems.
Policy 1e: Maintain coordination of noise control policies and standards with the surrounding cities and Caltrans.
Policy 1f: Provide for implementation, periodic review and revision of the Noise Element.
Policy 1g: Provide for the education of the community in the nature and extent of noise in the City of Lawndale.

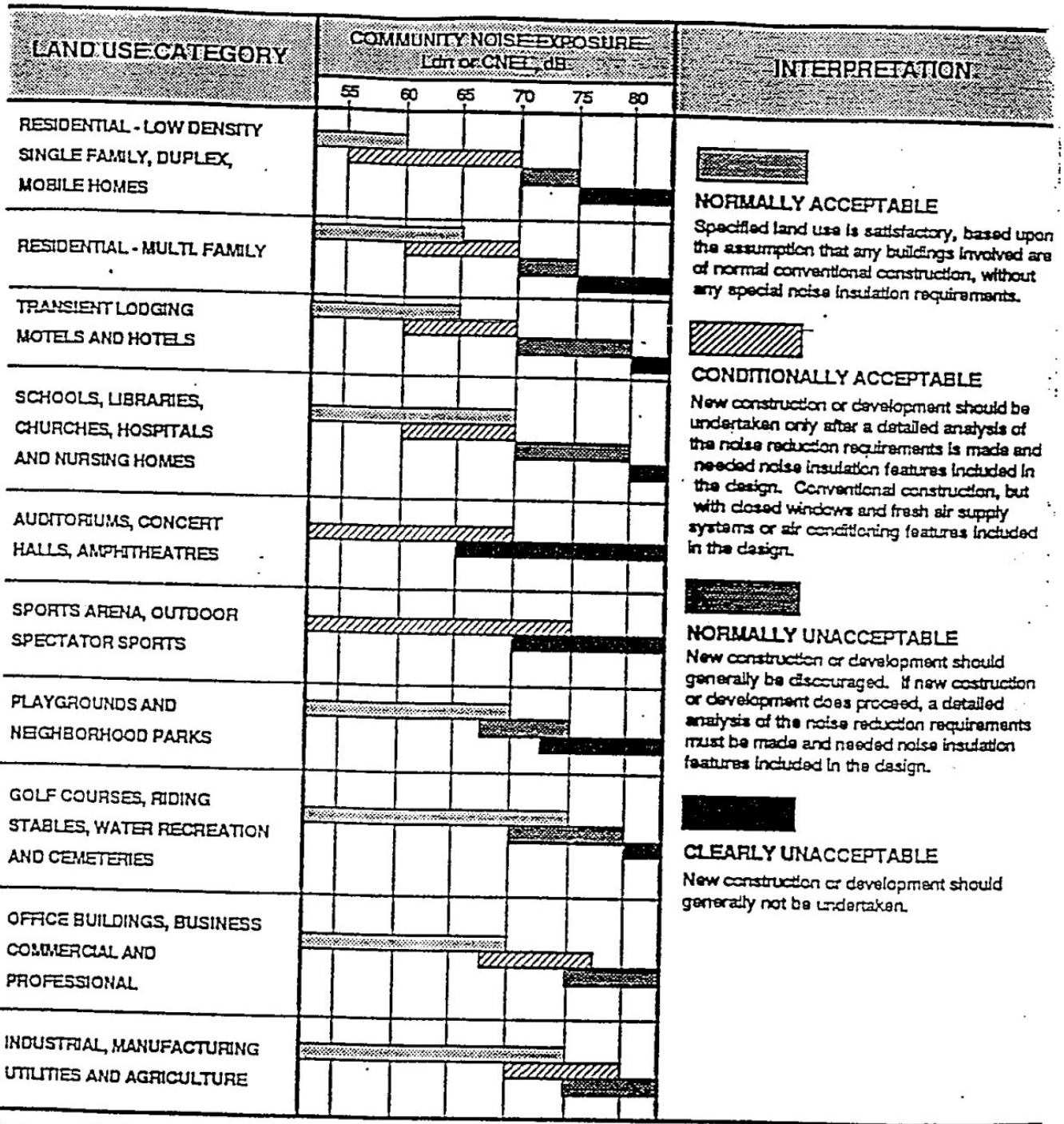
Implementation Programs
1.1 Comprehensive Noise Ordinance Adoption: Adopt a comprehensive noise ordinance to prohibit unwanted and unnecessary sound. The ordinance shall identify acceptable property line sound level limits and control noise sources such as barking dogs, mechanical equipment, amplified music, construction activity and other noise identified as disturbing, excessive or offensive.
1.2 Noise Compatibility Standards: Adopt the land use noise compatibility standards presented in Figure A for general planning and zoning purposes.
1.3 Noise Insulation Standards: Enforce the California Administrative Code, Title 24, Noise Insulation Standards. Title 24 requires that an acoustical analysis be performed for all new multi-family construction in areas where the exterior sound level exceeds 60 CNEL. The analysis shall ensure that the building design limits the interior noise environment to 45 CNEL or below.

1.4 Noise Insulation Standards for Single-Family Dwellings: Adopt a policy or implementation ordinance making California Administrative Code, Title 24, Noise Insulation Standards applicable to new single0family dwellings.
1.5 Project Review: Review actions or projects that may have the potential to generate noise impacts which may impact existing land uses.
1.6 Acoustical Analysis: Require noise studies for projects where exterior noise levels exceed 60 dB CNEL to identify potential noise impacts, analyze mitigation alternatives, and identify methods to monitor the effectiveness of the mitigation following implementation.
1.7 Transportation Noise Standards: Develop noise standards for use in reviewing the construction and improvement of any roadway, railroad, or other transit system.
1.8 Enforce Motor Vehicle Code: Enforce the provisions of the State Motor Vehicle Code which requires that all vehicles be equipped with a properly maintained muffler and that the exhaust system not be modified.
1.9 Regulate Traffic Flow: Review traffic flow systems and synchronize signals to avoid traffic stops which produce excessive noise wherever possible.
1.10 Limit Truck Noise: Limit truck traffic in noise sensitive areas.
- Increasing the distance from the noise source to sensitive receptors by creation of setbacks;
- Placing non-noise sensitive uses such as parking lots and utility areas between the noise source and receiver; and
- Orient usable outdoor living space such as balconies, patios, and children play areas away from roadways.

Noise/Land Use Compatibility

Exhibit F, Noise and Land Use Compatibility presents a land use compatibility chart for community noise originally prepared by the California Office of Noise Control (1987). The table identifies “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” exterior noise levels for various land uses. A “conditionally acceptable” designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a “normally acceptable” designation indicates that standard construction can occur with no special noise reduction requirements. This land use compatibility chart is based on the 24-hour descriptor CNEL.

Exhibit F: Existing Noise and Land Use Compatibility



Source: California Department of Health Services Noise Element Guidelines, 1987.

4.3.2 City of Lawndale General Plan 2023

The following Goal, Policies, and Actions are proposed for the 2023 City of Lawndale General Plan.

Goal PS-6: An environment where excessive or harmful noise pollution is limited.

Noise levels within the community can affect the quality of life experienced by people living and working in Lawndale. High noise levels can create stress and irritation. The following policies and actions address other potential sources of excessive noise by creating effective strategies to reduce and limit the community's exposure to loud sources of noise.

PS-6 Policies

PS-6.1 **California Building Code.** Adhere to the latest standards related to noise in the most current edition of the California Building Code to avoid or minimize noise pollution in the community.

PS-6.2 **Noise Exposure**. Consider the noise compatibility of existing and future development when making land use planning decisions. Require development and infrastructure projects to be consistent with the land use compatibility standards contained in Table PS-1 and the Lawndale Municipal Code to facilitate acceptable noise exposure levels for existing and future development.

PS-6.3 **Noise Mitigation**. Require new development to mitigate excessive noise to the standards indicated in Table PS-1 and the Lawndale Municipal Code through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials.

PS-6.4 **Acoustical Studies**. Require acoustical studies for new discretionary developments and transportation improvements that have the potential to affect existing noise-sensitive uses such as schools, hospitals, libraries, care facilities, and residential areas; and for projects that would introduce new noise-sensitive uses into an area where existing noise levels may exceed the thresholds identified in this element. For projects that are required to prepare an acoustical study, the following mobile and stationary noise source criteria shall be used to determine the significance of those impacts.

A. Mobile Noise Sources:

- Where existing traffic noise levels are within or below the "normally acceptable" noise criteria at the affected land use (see Table PS-1), a readily perceptible 5 dBA CNEL or greater increase in roadway noise will be considered significant;
- Where existing traffic noise levels falls within the "conditionally acceptable" noise criteria at the sensitive land use, a +3 dBA CNEL or greater increase in roadway noise levels will be considered significant; and

- Where existing traffic noise levels exceed the "conditionally acceptable" noise criteria at the sensitive land use, a + 1.5 dBA CNEL or greater increase in roadway noise levels will be considered significant

B. Stationary and Non-Transportation Noise Sources

A significant impact will occur if the project results in an exceedance of the noise level standards contained in this element, or the project will result in an increase in ambient noise levels by more than 3 dB, whichever is greater.

PS-6.5 **Roadway Noise**. Encourage nonmotorized transportation alternatives for local trips and the implementation of noise sensitivity measures in the public realm, including traffic-calming road design, lateral separation, natural buffers, and setbacks to decrease excessive motor vehicle noise.

PS-6.6 **Freeway Noise**. Coordinate with the California Department of Transportation (Caltrans) to achieve maximum noise abatement in the design of new freeway projects or improvements along I-405.

PS-6.7 **Railroad Noise**. Coordinate with Burlington Northern and Santa Fe Rail (BNSF) to support and maintain reasonable limits on the use of bells and whistles, and the speed and hours of rail operation in affected areas of the City, and maintain adequate setbacks and buffer zones along rail lines to reduce adverse noise impacts on sensitive receptors.

PS-6.8 **Commercial Noise**. Require the use of noise attenuation measures, including screening and buffering techniques, for all new commercial development expected to produce excessive noise; in existing cases where the City's noise standards are exceeded, work with Code Enforcement to require compliance.

PS-6.9 **Construction Noise**. Require construction activities to reduce noise impacts on adjacent uses to the criteria identified to the maximum extent feasible by complying with Chapter 8.20 of the Lawndale Municipal Code and use best practices.

PS-6.10 **Special Events**. Temporary special events which generate noise in excess of local noise standards including, but not limited to, festivals, concerts, parades, and other similar activities may be considered on a case-by-case basis through issuance of a temporary use permit.

PS-6.11 **Temporary Emergency Operations and Emergency Equipment Usage**. Temporary emergency operations or emergency equipment usage are exempt from noise standard criteria set by this element.

PS-6.12 **Interjurisdictional and Multiagency Coordination**. Coordinate with neighboring cities and transportation providers such as Caltrans to minimize noise conflicts between land uses along the City's boundaries.

PS-6.13 **Community Education**. Provide education to the community regarding potential noise sources and how to reduce them or report violations.

PS-6.14 Vibration Studies. Require vibration impact studies for new discretionary development and transportation improvements whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings.

PS-6 Actions

PS-6a Monitor changes in the California Building Code and other federal and State laws and regulations related to noise and incorporate necessary changes into the Municipal Code and building codes as required.

PS-6b Review the Lawndale Municipal Code and update as necessary so that the noise standards are consistent with this General Plan, including Table PS-1, and to require new residential, mixed-use with a residential component, and other noise-sensitive development to be designed to minimize noise exposure to noise sensitive uses through incorporation of site planning and architectural techniques. The update shall also include noise standards for residential uses within a mixed-use development, which may differ from other adopted residential noise standards.

PS-6c Review new development and transportation projects for compliance with the noise requirements established in this General Plan, including the standards established in Table PS-1 and the Lawndale Municipal Code. Where necessary, require new development to mitigate excessive noise through best practices, including building location and orientation, building design features, placement of noise-generating equipment away from sensitive receptors, shielding of noise-generating equipment, placement of noise-tolerant features between noise sources and sensitive receptors, and use of noise-minimizing materials such as rubberized asphalt.

PS-6d Require acoustical studies for all new discretionary projects, including those related to development and transportation, which have the potential to generate noise impacts which exceed the standards identified in this General Plan. The studies shall include representative noise measurements, estimates of existing and projected noise levels, and mitigation measures necessary to facilitate compliance with this element.

PS-6e Review the locations of proposed projects with the potential to generate stationary noise in relation to sensitive receptors through the discretionary project review process. Limit delivery or service hours for stores and businesses with loading areas, docks, or trash bins that front, side, border, or gain access on driveways next to residential and other noise sensitive areas. Only approve exceptions if full compliance with the nighttime limits of the noise regulations is achieved.

PS-6f Require all construction activity to comply with the limits (maximum noise levels, hours and days of allowed activity) established in the Lawndale Municipal Code in order to reduce impacts associated with temporary construction noise to the extent feasible.

PS-6g Actively enforce the standards identified within the Lawndale Municipal Code to reduce impacts to the extent feasible. Update and amend the Lawndale Municipal Code as

appropriate. Provide a link on the City's website for those to file complaints against activities and uses that may be violating the Municipal Code.

PS-6h Require new residential projects located adjacent to railroad lines to follow the FTA vibration screening distance criteria to prevent residential uses from being exposed to vibrations exceeding 72 VdB for frequent events (more than 70 events per day), 75 VdB for occasional events (30-70 events per day), or 80 VdB for infrequent events (less than 30 events per day).

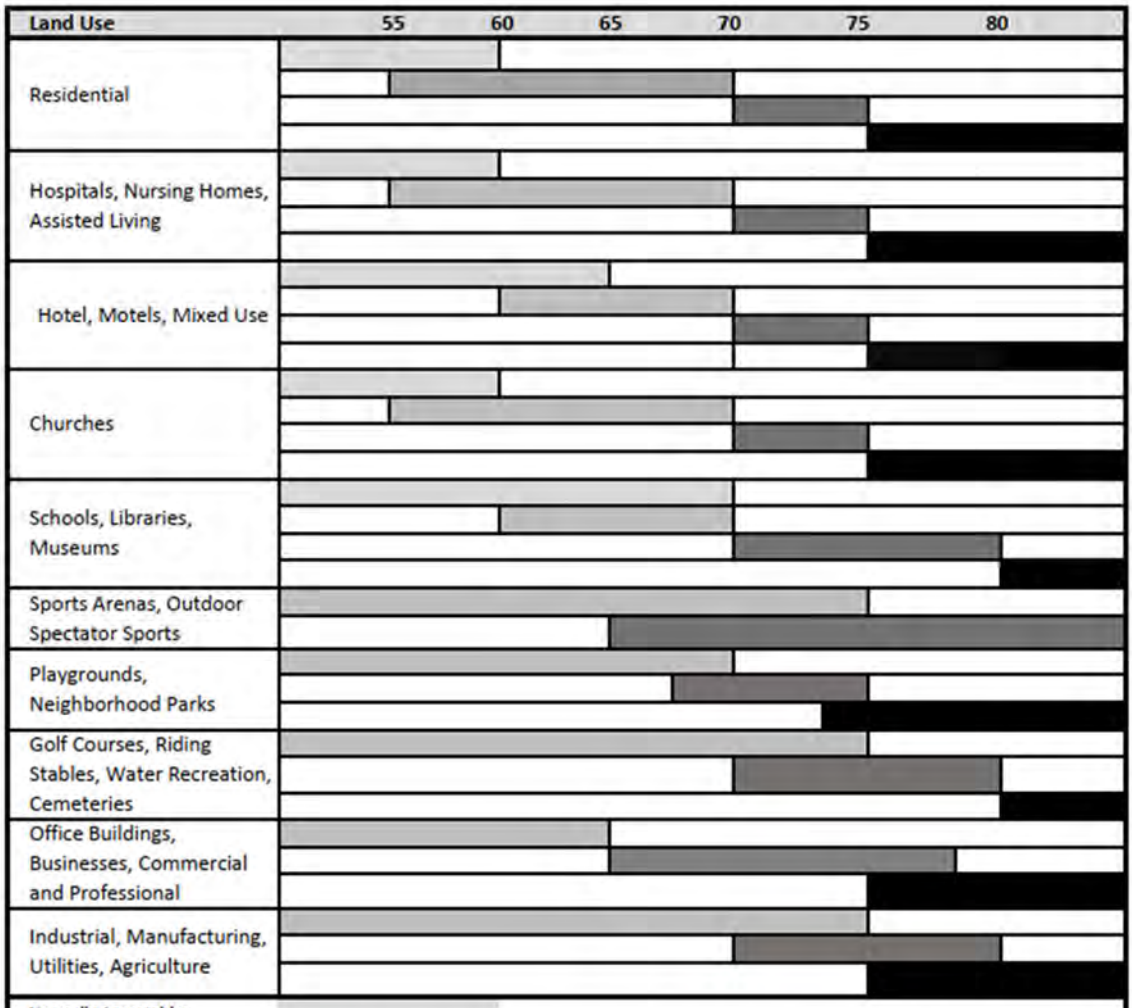
PS-6i Enforce the provisions of the most current California Motor Vehicle Code regarding muffler maintenance and exhaust systems.

PS-6j Limit truck traffic in noise sensitive areas.

PS-6k Require vibration impact studies for all new discretionary projects, including those related to development and transportation, whose construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. The studies shall include a detailed mitigation plan to avoid any potential significant impacts to existing structures due to groundborne vibrations, based on the California Department of Transportation's Construction Vibration Guidance Manual.

Exhibit G presents the proposed Land Use Compatibilities Guidelines, Table PS-1 in the proposed Public Safety Element.

Exhibit G: Proposed Noise and Land Use Compatibility



Normally Acceptable:

Specified land uses is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation or requirements.

Conditionally Acceptable:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.

Normally Unacceptable:

New construction and development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Unacceptable

New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: California Office of Noise Control. Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 2017.

Notes:

1. Where a proposed use is not specifically listed, the use shall comply with the standards for the most similar use as determined by the City.

2. Outdoor activity areas for residential development are considered to be the backyard patios or decks of single-family units and the common areas where people generally congregate for multi-family developments. Where common outdoor activity areas for multi-family developments comply with the outdoor noise level standard, the standard will not be applied at patios or decks of individual units provided noise-reducing measures are incorporated (e.g., orientation of patio/deck, screening of patio with masonry or other noise-attenuating material). Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities; not all residential developments include outdoor activity areas.

4.3.3 City of Lawndale Municipal Code

The Noise Ordinance of the Municipal Code is designed to protect people from non-transportation noise sources such as construction activity; commercial, industrial, and agricultural operations; machinery and pumps; and air conditioners. Enforcement of the ordinance ensures that adjacent properties are not exposed to excessive noise from stationary sources. Enforcing the ordinance includes requiring proposed development projects to show compliance with the ordinance, including operating in accordance with noise levels and hours of operations limits placed on the project site. The City also requires construction activity to comply with established work schedule limits. The ordinance is reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

The City of Lawndale's Noise Ordinance consists of Chapter 8.20 of the Lawndale Municipal Code. The zoning code, Title 17, also contains specific noise limits relating to specific uses.

Section 8.20.010 defines sound-amplifying equipment as any machine or device for the amplification of the human voice, music, or any other sound, including automobile radios and warning devices.

Sections 8.20.020, 8.20.030, and 8.20.050 outline noise restrictions with regards to noncommercial sound trucks, commercial sound trucks or advertising vehicles, and sound-producing vehicles at night.

Section 8.20.060 states that "No person shall make, cause or suffer, or permit to be made upon any premises owned, occupied or controlled by that person any noises or sounds which are unreasonably loud or physically annoying to persons of ordinary sensitivity, or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to other persons." This section also states that the previous statement does not apply to noise or sounds generated in connection with any of the following:

1. Emergency vehicle response sounds and/or sounds from necessary equipment utilized by members of law enforcement, the fire department, paramedics or other emergency responders for the purpose of responding to an emergency or necessary to restore, preserve, protect or save lives or property from imminent danger of loss or harm.
2. Safety and warning devices, including but not limited to, train horns and railroad crossing warning systems, which are consistent with applicable state and federal laws.
3. The installation, maintenance, repair or replacement of public utilities or public infrastructure conducted by the city, other public entity or a public or private utility company, or their agents, contractors and employees, while undertaking a public works project, subject to the restrictions contained in Section 8.20.070 for allowable construction times.
4. School-related activities and/or programs, including, but not limited to, athletic and entertainment events and activities, provided said activities are conducted on the grounds of a public or private school or college or on other public property.
5. Noise from special community events provided said events are conducted by the city or pursuant to a permit or license issued by the city, including, but not limited to, occasional outdoor events/activities, outdoor gatherings, public dances, shows and sporting and entertainment events.
6. Any activity to the extent regulation thereof has been preempted by state or federal law.

Section 8.20.070 outlines the allowable hours for construction as follows:

> Construction activity may be conducted between the hours of seven a.m. and seven p.m., Monday through Friday (except national holidays), and eight a.m. and five p.m. Saturdays. Construction activity is prohibited at all other hours and on Sundays and national holidays. For purposes of this section, "construction" or "construction activity" shall include site preparation, demolition, grading, excavation, and the erection, improvement, remodeling or repair of structures, including operation of equipment or machinery and the delivery of materials associated with those activities.

This section also lists scenarios where the provisions of subsection A do not apply.

Section 17.48.273(A) specifies that the interior of apartments in the R-4 zone must not exceed 45 dBA CNEL. Part B states that mechanical equipment in this zone will be screened from view and not exceed a maximum of 50 dBA.

Section 17.44.020(K) regulates pool equipment to 40 dBA CNEL as measured from the property line. Part (L) regulations air conditioning equipment to 40 dBA CNEL as measured from the property line as well.

Section 17.96.040(A)12 states that small collection facilities shall not exceed noise levels of 55 dBA as measured at a residential property or 60 dBA as measured at other adjacent properties.

Section 17.80.070(A)16 states that the interior noise levels of condominiums will not exceed 40 dBA CNEL and sound insulation requirements.

Section 17.94.040(A)19 limits the noise levels of adult-oriented businesses to 55 dBA as measured on the property line.

5.0 Study Method and Procedure

The following section describes the noise modeling procedures and assumptions used for this assessment.

5.1 Noise Measurement Procedure and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the first row of houses
- Locations that are acoustically representative and equivalent of the area of concern
- Human land usage
- Sites clear of major obstruction and contamination

MD conducted the sound level measurements in accordance with the City and Caltrans technical noise specifications. All measurements equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed 5-feet above the ground for all measurements
- Sound level meters were calibrated before and after each measurement
- Following the calibration of equipment, a windscreen was placed over the microphone
- Frequency weighting was set on “A” and slow response
- Results of the long-term noise measurements were recorded on field data sheets
- During any short-term noise measurements, any noise contaminations such as barking dogs, local traffic, lawnmowers, or aircraft flyovers were noted
- Temperature and sky conditions were observed and documented

5.2 SoundPLAN Noise Modeling

SoundPLAN acoustical modeling software was utilized to create existing (2023), future (2045) without Project (Adopted General Plan), and future (2045) with Project (Proposed General Plan) traffic noise level contours for the 15 segments analyzed in the Project’s traffic impact analysis provided by Kittelson & Associates, Inc. and 2 segments from Caltrans traffic census program. The total change in trips from 2023 to 2045 provided by Kittelson & Associates, Inc. was applied to those 2 segments. Model parameters included average daily traffic volumes, day/evening/night split, roadway classification, width, speed, and truck mix. All modeled roadways were assumed to have a “hard site”, as the majority of analysis occurs at 50 feet from the centerline of the road. Possible reductions in noise levels due to intervening topography and buildings were not accounted for in this analysis. Roadway modeling assumptions utilized for the technical study are provided in Table 8 and Table 9 and in Appendix C. A summary of the model parameters and REMEL adjustments is presented below.

- Roadway classification – (e.g., freeway, major arterial, arterial, secondary, collector, etc.),
- Roadway Active Width – (distance between the center of the outermost travel lanes on each side of the roadway)
- Average Daily Traffic Volumes (ADT), Travel Speeds, Percentages of automobiles, medium trucks, and heavy trucks
- Roadway grade and angle of view
- Site Conditions (e.g., soft vs. hard)
- Percentage of total ADT which flows each hour throughout a 24-hour period

5.3 FHWA Traffic Noise Prediction Model

The FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) was utilized to model and compare existing traffic noise levels to 2045 Future noise levels. The FHWA model arrives at the predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Roadway modeling assumptions utilized for the technical study are provided in Table 8 and Table 9.

Table 8: Roadway Noise Modeling Parameters

Roadway	Segment	Existing ADT[1]	2045 No Project ADT[1]	2045 With Project ADT[1]	Speed[2]	Vehicle Mix[3]
Inglewood Ave	Marine Ave to 153rd Pl	30,382	29,900	30,400	35	CLASS6
Inglewood Ave	I-405 S Ent to Manhattan Beach Blvd	46,980	47,100	47,200	35	CLASS8
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	34,669	33,600	33,800	40	CLASS6
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	23,463	27,400	27,500	40	CLASS14
Artesia Blvd	Inglewood Ave to Grevillea Ave	33,333	33,500	33,500	35	CLASS6
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	36,715	34,600	35,900	35	CLASS6
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	39,254	39,000	40,300	35	CLASS6
Hawthorne Blvd	162nd St to 166th St	44,037	43,200	44,900	35	CLASS8
Hawthorne Blvd	169th St to Redondo Beach Blvd	40,769	40,200	40,300	35	CLASS8
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	32,747	36,400	36,300	40	CLASS6
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	18,912	22,300	22,300	40	CLASS14
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	19,794	23,800	24,100	40	CLASS14
Prairie Ave	Marine Ave to Manhattan Beach Blvd	25,223	28,300	28,900	40	CLASS14
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	21,543	23,600	24,000	35	CLASS14
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	27,196	32,900	33,200	35	CLASS14
San Diego Freeway	West of Hawthorne Blvd	30,382	29,900	30,400	65	CLASS8
San Diego Freeway	East of Hawthorne Blvd	46,980	47,100	47,200	65	CLASS8

Notes:
1) Kittelson Associates, May 2023.
2) Speed was modeled as posted.
3) See Table 9

Table 9: Vehicle Mix Data

Motor-Vehicle Type[1,2]	Daytime % (7AM to 7 PM)	Evening % (7 PM to 10 PM)	Night % (10 PM to 7 AM)	Total % of Traffic Flow
CLASS6				
Automobiles	77.8%	12.8%	9.4%	87.5%
Medium Trucks	80.5%	8.7%	10.8%	11.5%
Heavy Trucks	75.8%	8.9%	15.3%	1.1%
CLASS8				
Automobiles	76.1%	12.7%	11.2%	87.0%
Medium Trucks	80.6%	7.5%	11.9%	11.8%
Heavy Trucks	71.2%	8.4%	20.4%	1.3%
CLASS14				
Automobiles	81.8%	11.5%	6.7%	88.3%
Medium Trucks	84.6%	6.6%	8.8%	11.1%
Heavy Trucks	81.5%	4.6%	13.9%	0.6%

Notes:
[1] Lawndale 24hr traffic counts, Kittelson & Associates, Inc. 2023.
[2] Project Trip Gen and Fleet Mix Info, Kittelson & Associates, Inc. 2023.

6.0 Existing Noise Environment

6.1 General Land Use Noise

Existing land uses within the Project Area include single and multiple-family residential development, commercial, industrial, open space, and public facility land uses. Noise sources associated with existing land uses include residential maintenance, parking lot noise, heating, and cooling system (HVAC) noise, property maintenance noise, trash truck noise, loading and unloading noise, and recreational noise.

6.2 Noise Measurements

Three (3) long-term 24-hour noise measurements and ten (10) short-term 15-minute noise measurements were conducted throughout the Project Area to document the existing noise environment. Noise measurement locations are shown in Exhibit H.

6.2.1 Short-Term Noise Measurements

Ten short-term noise measurements (15-minute) were taken on May 24th, 2023, and May 26th, 2023, in order to document the daytime Leq level at different locations throughout the Project Area. Measured noise levels ranged between 57.4 and 72.3 dBA Leq. Vehicle noise associated with Hawthorne Blvd., Marine Ave., and Rosecrans Ave. noise were the primary sources of ambient noise. Noise measurement results are presented in Table 10. Field notes and meter output are provided in Appendix B.

Table 10: Short-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Start Time	A-Weighted Sound Level (dBA)							
			Leq	Lmax	Lmin	L(2)	L(8)	L(25)	L(50)	L(90)
ST1	4317 Rosecrans Ave	5:37 PM	72.3	80.4	54.4	77.9	76.3	73.9	70.7	63.4
ST2	4221 Marine Ave	4:25 PM	69.7	82.7	53.7	74.9	73.1	70.9	68.3	61.8
ST3	15300 Hawthorne Blvd	4:03 PM	67.6	75.9	55.0	73.6	72.2	70.1	63.9	57.1
ST4	4241 Redondo Beach Blvd	2:48 PM	64.9	78.5	49.0	71.0	69.0	66.2	62.8	55.0
ST5	16607 Hawthorne Blvd	12:43 PM	66.4	79.4	51.1	72.2	70.6	67.9	64.4	55.7
ST6	16605 Osage Ave	3:15 PM	60.4	66.5	57.0	63.5	61.9	60.8	60.1	58.9
ST7	4521 W 147th St	5:14 PM	57.8	75.7	47.5	66.0	60.7	56.1	52.9	49.3
ST8	4604 Marine Ave	4:50 PM	66.0	82.7	50.6	71.8	70.1	66.8	62.8	56.3
ST9	16725 Firmona Ave	1:27 PM	57.4	72.8	42.4	64.3	61.3	57.9	54.0	45.7
ST10	4130 154th St	3:42 PM	59.9	78.2	47.2	68.8	63.0	57.5	53.2	48.9

6.2.2 Long-Term Noise Measurements

Three (3) long-term noise measurements (24 consecutive hours) were taken in order to document the Community Noise Equivalent Level (CNEL) at different locations throughout the Project Area. As shown in Table 11, the measured CNEL was 77.7 dBA CNEL at 55 feet from the centerline of Manhattan Beach

Blvd. and 120 feet from the centerline of San Diego Freeway, 74.8 dBA CNEL at 20 feet from the centerline of Freeman Ave and 170 feet from the centerline of San Diego Freeway, and 61.6 dBA CNEL at 50 feet from the railroad and 160 feet from the centerline of Artesia Blvd. The primary noise source was vehicle traffic. Table 11 also outlines the daytime (7 AM to 7 PM), evening (7 PM to 10 PM), and nighttime (10 PM to 7 AM) Leq levels at each location. These represent the average level over each time period (day/evening/night). Field notes and meter output are provided in Appendix B.

Table 11: Long-Term Noise Measurement Summary

Noise Measurement Location	Approximate Location	Date	Description	A-Weighted Sound Level (dBA)			
				Daytime Leq	Evening Leq	Nighttime Leq	CNEL
LT1	4538 Manhattan Beach Blvd	05/24/23-05/25/23	I-405 & Manhattan Beach Blvd traffic noise	72.8	72.8	70.4	77.7
LT2	16310 Freeman Ave	05/24/23-05/25/23	I-405 traffic noise	72.4	70.2	66.7	74.8
LT3	4626 W 173rd St	05/31/23-06/01/23	Artesia Blvd traffic noise	62.9	51.5	50.2	61.6

Notes:
dBA = A-weighted decibels
Leq = equivalent noise level
Lmax = maximum noise level
Lmin = minimum noise level
Ln = noise level exceeded n percent of the measurement period
24-hour duration

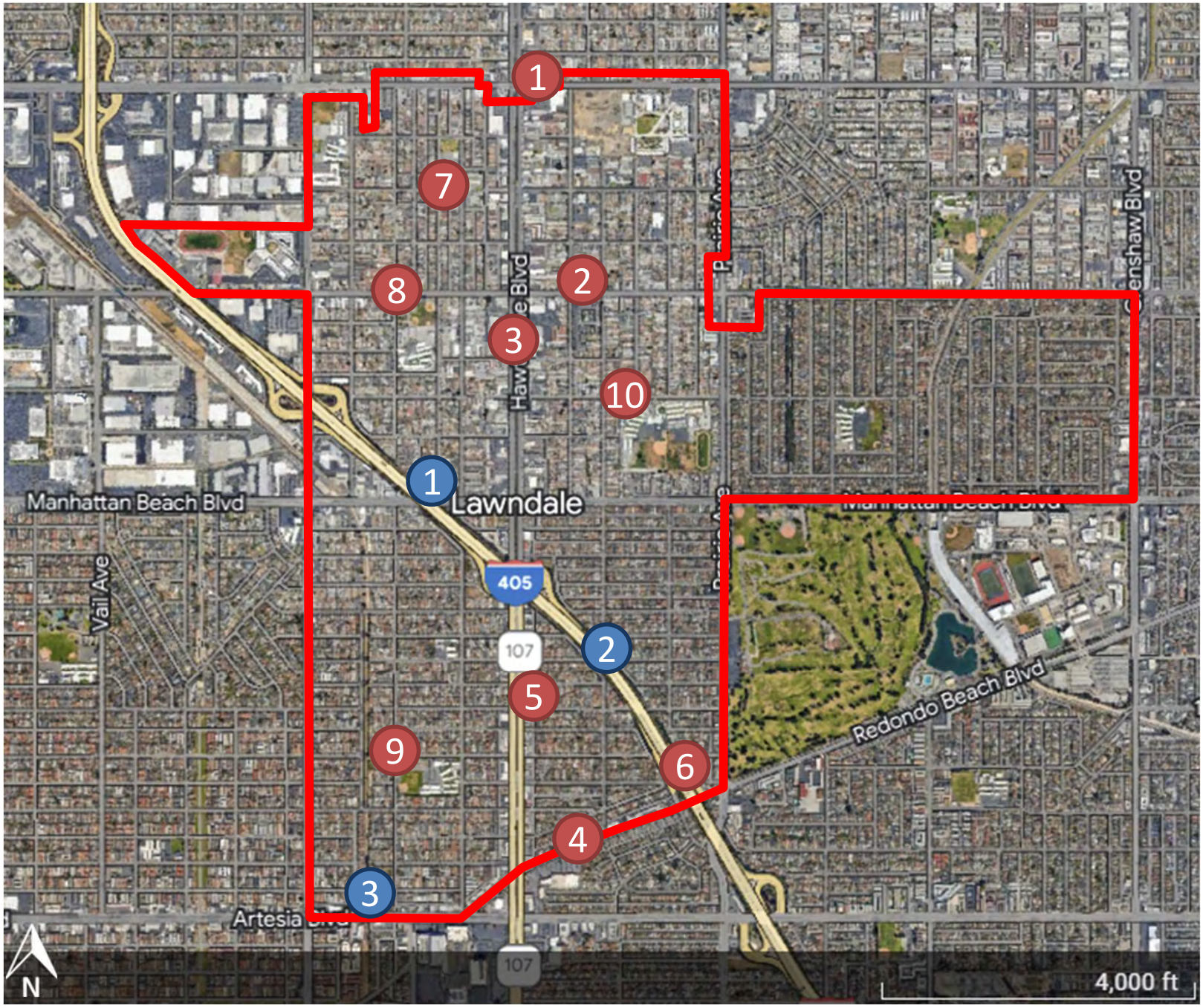


Exhibit H

Measurement Location Map

= Short-Term Monitoring Location

= Long-Term Monitoring Location

6.3 Existing Noise Modeling

The primary sources of noise in Lawndale are transportation-related noises. Major roadways create ambient noise levels that affect the overall quality of life in the community. Modeled existing noise levels provided in Table 12 and on Exhibit I confirm that there are currently sensitive land uses in the project area that are exposed to noise levels above 65 dBA CNEL.

It should be noted that the modeled noise contours do not take into account factors such as existing buildings, walls, etc., that may reduce or, in some cases, amplify or reduce noise sources. The model also assumes hard site, when in reality, some of the City has soft site ground such as grass or dirt, which will reduce the noise levels. Measured noise levels provided in Tables 12 and 13 do take into account existing structures as well as other noise sources.

Those areas in the City that currently experience sound levels greater than 65 dBA CNEL are typically near major vehicular traffic corridors. Traffic noise levels typically depend on three factors: (1) the volume of traffic, (2) the average speed of traffic, and (3) the vehicle mix (i.e., the percentage of trucks versus automobiles in the traffic flow). Vehicle noise includes noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include the distance from the highway, terrain, heavy vegetation, and natural and structural obstacles. While tire noise from automobiles is generally located at ground level, some truck noise sources may emanate from 12 feet or more above the ground.

Table 12: Existing Exterior Noise Levels Along Roadways

Roadway	Segment Limits	CNEL, dBA @50 ft[4]	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.3	107	338	1,068	3,378
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	172	544	1,720	5,439
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.5	178	562	1,777	5,619
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.0	99	313	989	3,127
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	123	390	1,234	3,901
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.3	136	430	1,361	4,303
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	145	460	1,455	4,600
Hawthorne Blvd	162nd St to 166th St	72.6	184	582	1,839	5,816
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	170	538	1,703	5,384
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.3	168	531	1,678	5,308
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	71.8	75	237	749	2,369
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.0	78	248	784	2,480
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.0	100	316	999	3,160
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	70.7	59	187	591	1,867
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	71.9	78	246	778	2,461
San Diego Freeway	West of Hawthorne Blvd	85.4	3,480	11,003	34,795	110,033
San Diego Freeway	East of Hawthorne Blvd	85.2	3,315	10,483	33,152	104,835
Notes:						

Roadway	Segment Limits	CNEL, dBA @50 ft[4]	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA

1) Exterior noise levels calculated at 5-feet above ground.
2) Noise levels calculated from centerline of subject roadway.
3) Contour distances do not take into account potential noise reduction from existing barriers such as buildings, walls or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.
4) Hawthorne Blvd & San Diego Freeway were calculated at 100 ft away.

Exhibit I

Existing Roadway Noise Level Contours (CNEL)

6.3 Existing Airport/Aircraft Noise

There are no airports located within the Project Area, and the Project Area is not located within any airport noise contours. The closest airport to the Project Area is the Hawthorne Municipal Airport located approximately 1.4 miles northeast of the Project Area. The Los Angeles International Airport is 2.5 miles from the Project Are. The noise contours associated with these airports do not encroach into the Project Area.

6.4 Existing Vibration Sources in the Project Area

The main sources of vibration in the project area are related to vehicles, construction, and railway. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface (Caltrans 2020).

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary source of vibration during construction is usually from a bulldozer. A large bulldozer has a peak particle velocity of 0.089 inches per second (87 VdB) at 25 feet.

One freight rail line runs through the City of Lawndale. According to the Federal Railroad Administration Crossing Inventory Forms, there are 2 daytime and 2 nighttime freight trains that pass through the city each day at a maximum of 20 MPH. Existing buildings are about 50 feet from the centerline of the railway. Therefore, the expected maximum vibration at these buildings is 76 VdB (0.025 inches per second).

7.0 Future Noise Environment, Impacts, and Mitigation

This assessment analyzes future noise impacts to and from the proposed Project and compares the results to the City of Lawndale General Plan Policies and Noise Standards. The analysis details the estimated noise levels associated with traffic from adjacent roadways and on-site stationary noise sources. Each future noise source related to the Project was evaluated in light of applicable City of Lawndale General Plan policies and ordinances, and programmatic mitigation measures are provided as applicable.

7.1 Transportation Noise and Vibration

Transportation noise includes noise from aircraft, railways, and roadways. The Project Area is outside of any airport 65 dBA CNEL contours and therefore, there is no aircraft impact.

7.1.1 Railway Vibration

One rail line runs through the City of Lawndale. The proposed Project could facilitate the construction of low-density residential projects adjacent to the existing railroad. With regards to vibration impacts on new development near railroads, human disturbance is the primary concern. It is extremely rare for vibration levels from trains passing to result in structural damage to buildings. In addition, buses and other transit vehicles are not anticipated to generate excessive vibration levels that would disturb sensitive receptors because these vehicles are traveling at lower speeds and do not generate substantial vibrations.

The FTA's *Transit Noise and Vibration Impact Assessment* document provides recommended ground-borne vibration criteria for general environmental assessments. The vibration criteria vary according to the sensitivity of the land use and the frequency of vibration events (i.e., number of trains passing by the sensitive land use), as shown in Table 13.

Table 13: FTA Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category/Type	Impact Level (Velocity Decibels)		
	Frequent Events	Occasional Events	Infrequent Events
Category 1 – Buildings with sensitive equipment	65 VdB	65 VdB	65 VdB
Category 2 – Buildings where people sleep	72 VdB	75 VdB	80 VdB
Category 3 – Institutional buildings	75 VdB	78 VdB	83 VdB
Source: FTA 2018			

There are an estimated 4 trains passing per day, according to the 2021 U.S. Dot Crossing Inventory Form. For infrequent events (i.e., less than 30 trains passing by in one day), the criteria generally vary between 65 VdB for buildings where vibration would interfere with interior operations (e.g., highly sensitive research facilities, hospitals) to 80 VdB for residences and buildings where people normally sleep, to 83 VdB for land uses with primarily daytime use. Highly sensitive research facilities and hospitals are not

anticipated under the proposed Project, and therefore, the 65 VdB threshold is not considered further in this analysis. The FTA's guidance document contains generalized ground surface vibration curves derived from vibration measurements of transit systems in North America (FTA 2018, Figure 6-4). The freight curve assumes the freight is traveling at 50 mph. However, the U.S. Dot Crossing Inventory Form states that the train's maximum timetable speed is 20 mph. According to Table 6-11 in the FTA manual, there is an 8 VdB decrease for a vehicle moving 20 mph compared to 50 mph. Based on these vibration prediction curves and the speed adjustment, the vibration levels will be 80 VdB at residential developments approximately 30 feet away from the passenger rail line centerline and will not exceed the FTA's recommended threshold of 80 VdB for residences. Therefore, future residential developments along the railway will not be exposed to excessive transit train vibration levels that exceed FTA-recommended vibration criteria of 80 VdB if the development is a minimum of 30 feet away from the railroad centerline and the impact is less than significant in accordance with proposed action PS-6h.

7.1.2 Vehicle Traffic Noise

The primary noise source in the Project Area will continue to be vehicle traffic. Future traffic noise level contours are presented in Exhibits I and J. Tables 14 and 15 show the future noise levels at a distance of 50 feet from the centerline of studied roadways by the year 2045 for No Project and With Project. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also provided.

Table 14: 2045 No Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA @50 ft[4]	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.2	105	332	1051	3325
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	172	545	1724	5453
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.4	172	545	1722	5446
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.6	115	365	1155	3652
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	124	392	1240	3921
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.1	128	405	1282	4055
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	145	457	1445	4571
Hawthorne Blvd	162nd St to 166th St	72.6	180	571	1804	5706
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	168	531	1679	5309
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.7	187	590	1866	5900
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	72.5	88	279	883	2794
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.8	94	298	943	2981
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.5	112	355	1121	3545
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	71.1	65	205	647	2046
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	72.7	94	298	941	2977
San Diego Freeway	West of Hawthorne Blvd	85.4	3466	10960	34658	109600
San Diego Freeway	East of Hawthorne Blvd	85.2	3301	10440	33015	104401

Notes:
1) Exterior noise levels calculated at 5 feet above ground.
2) Noise levels calculated from centerline of subject roadway.

Roadway	Segment Limits	CNEL, dBA @50 ft[4]	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA

3) Contour Distances do not take into account potential noise reduction from existing barriers such as buildings, walls, or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.
4) Hawthorne Blvd & San Diego Freeway were calculated at 100 ft away.

Table 15: 2045 Plus Project Traffic Noise Levels (dBA, CNEL)

Roadway	Segment Limits	CNEL, dBA @50 ft[4]	Distance to Contour (feet)			
			70 dBA	65 dBA	60 dBA	55 dBA
Inglewood Ave	Marine Ave to 153rd Pl	73.3	107	338	1069	3380
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	173	546	1728	5465
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.4	173	491	1553	4911
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.7	116	366	1159	3665
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	124	392	1240	3921
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.2	133	421	1330	4207
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.7	149	472	1494	4723
Hawthorne Blvd	162nd St to 166th St	72.7	188	593	1875	5930
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	168	532	1683	5323
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.7	186	588	1861	5884
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	72.5	88	279	883	2794
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.8	95	302	955	3019
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.6	114	362	1145	3620
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	71.2	66	208	658	2080
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	72.8	95	300	950	3004
San Diego Freeway	West of Hawthorne Blvd	85.7	3712	11740	37124	117397
San Diego Freeway	East of Hawthorne Blvd	85.5	3197	10111	31973	101107

Notes:
1) Exterior noise levels calculated at 5 feet above ground.
2) Noise levels calculated from centerline of subject roadway.
3) Contour Distances do not take into account potential noise reduction from existing barriers such as buildings, walls, or berms as a worst-case scenario for planning screening purposes. Overall levels are likely lower at sensitive receptors.
4) Hawthorne Blvd & San Diego Freeway were calculated at 100 ft away.

As shown in Tables 14 and 15 and Exhibit I, J, and K, by the year 2045, existing land uses adjacent to the studied roadways will be exposed to noise levels that exceed the City's exterior standards of 65 dBA CNEL for sensitive uses. A significant impact would occur if the Project resulted in levels higher than 65 dBA CNEL and increased the overall roadway noise level by 3 dBA CNEL, which is a noticeable change in noise level.

Compared to existing traffic noise levels, 2045 without Project traffic volumes are expected to be up to 0.8 dBA CNEL louder than existing ambient noise levels at existing land uses and will result in inaudible increases in ambient noise along the analyzed roadways (see Table 16).

Compared to existing traffic noise levels, 2045 with Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and will result in inaudible increases in ambient noise. Implementation of the Project will therefore result in a less than significant impact to roadway noise levels.

Table 16: Change in Noise Along Roadways (dBA, CNEL @ 50')

Roadway	Segment	Existing	2045 No Project		2045 With Project	
		CNEL @ 50' dBA[3]	CNEL @ 50' dBA	Change in Noise Level	CNEL @ 50' dBA	Change in Noise Level
Inglewood Ave	Marine Ave to 153rd Pl	73.3	73.2	-0.1	73.3	0.0
Inglewood Ave	I-405 S Entrance to Manhattan Beach Blvd	75.4	75.4	0.0	75.4	0.0
Inglewood Ave	Manhattan Beach Blvd to Artesia Blvd	75.5	75.4	-0.1	75.4	-0.1
Manhattan Beach Blvd	Inglewood Ave to Hawthorne Blvd	73.0	73.6	0.6	73.7	0.7
Artesia Blvd	Inglewood Ave to Grevillea Ave	73.9	73.9	0.0	73.9	0.0
Hawthorne Blvd	Marine Ave to Manhattan Beach Blvd	71.3	71.1	-0.2	71.2	-0.1
Hawthorne Blvd	Manhattan Beach Blvd to 160th St	71.6	71.6	0.0	71.7	0.1
Hawthorne Blvd	162nd St to 166th St	72.6	72.6	0.0	72.7	0.1
Hawthorne Blvd	169th St to Redondo Beach Blvd	72.3	72.3	0.0	72.3	0.0
Rosecrans Ave	Hawthorne Blvd to Prairie Ave	75.3	75.7	0.4	75.7	0.4
Redondo Beach Blvd	Hawthorne Blvd to Prairie Ave	71.8	72.5	0.7	72.5	0.7
Manhattan Beach Blvd	Freeman Ave to Prairie Ave	72.0	72.8	0.8	72.8	0.8
Prairie Ave	Marine Ave to Manhattan Beach Blvd	73.0	73.5	0.5	73.6	0.6
Manhattan Beach Blvd	Prairie Ave to Crenshaw Blvd	70.7	71.1	0.4	71.2	0.5
Crenshaw Blvd	Marine Ave to Manhattan Beach Blvd	71.9	72.7	0.8	72.8	0.9
San Diego Freeway	West of Hawthorne Blvd	85.4	85.4	0.0	85.7	0.3
San Diego Freeway	East of Hawthorne Blvd	85.2	85.2	0.0	85.5	0.3

Notes:
1) Existing and Future traffic volumes compiled by Kittelson & Associates, Inc. 2023.
2) An impact would occur if the Project increased the roadway segment level by 3 dB or more (an audible difference) and resulting in a future level above 65 dBA CNEL.
3) Hawthorne Blvd & San Diego Freeway were calculated at 100 ft away.

Exhibit J

2045 No Project Noise Contours (CNEL)

Exhibit K

2045 With Project Noise Contours (CNEL)

Where proposed land uses are expected to be exposed to noise levels that exceed the land use compatibility criteria in Exhibit F, impacts can be mitigated to a level that is less than significant with the implementation of noise control measures, such as relocating residential outdoor recreational areas away from 60 dBA CNEL or greater areas or shielding outdoor areas using noise barriers. Per the General Plan, future development associated with implementation of the proposed Project requires a noise study prior to issuance of a grading permit and mitigation implemented if noise levels exceed normally acceptable levels as outlined in Exhibit F. For residential developments, the study must ensure that interior levels in livable areas do not exceed 45 dBA CNEL. The impact is less than significant with proposed policies PS-6.1, PS-6.2, PS-6.3, PS-6.4, and proposed action PS-6c.

7.2 Stationary Noise

Implementation of the Project could result in the future development of land uses that generate noise levels in excess of applicable City noise standards for non-transportation noise sources as outlined in Section 4.3.3. While the Project does not explicitly propose any new noise-generating uses, Project implementation would allow for the development of mixed-uses, increased residential development at higher densities, and new commercial development, which may result in new noise sources. Specific development projects and the details of future noise-generating land uses that may be located in the Project Area in the future are not known at this time. Additionally, noise from existing stationary sources, as identified in the Existing Settings Section, would continue to impact noise-sensitive land uses in the vicinity of the noise sources.

While no specific projects are proposed under the Project, changes in land use may allow for more intensive noise-generating uses in closer proximity to noise-sensitive uses. Where this occurs, detailed noise studies would be required to ensure that noise control measures are implemented into the project design. Such measures could include the redesign of stationary noise sources away from sensitive uses, construction of sound walls or berms between noise generating uses and sensitive uses, using buildings to create additional buffer distance and screening, or other site design measures to ensure that non-transportation (stationary) noise sources do not cause exterior and interior noise levels to exceed allowable standards at sensitive receptors.

The impact is less than significant with the implementation of the Municipal Code and proposed policies PS-6.3, PS-6.4, PS-6.8, and proposed actions PS-6c, PS-6d, and PS-6e.

7.3 Construction Noise

The degree of construction noise may vary for different projects within the scope of the proposed Project and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction. Construction must not occur between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or any time on Sunday or a Federal holiday per Section 8.20.070(A) of the Lawndale Municipal Code. Construction noise is exempt from the noise ordinance outside of those times.

The Environmental Protection Agency (EPA) has compiled data regarding the noise-generated characteristics of typical construction activities. The data is presented in Table 17. These noise levels

would diminish rapidly with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 86 dBA measured 50 feet from the noise source would reduce to 80 dBA at 100 feet. At 200 feet from the noise source, the noise level would reduce to 74 dBA. At 400 feet, the noise source would reduce by another 6 dBA to 68 dBA.

Table 17: Typical Construction Noise Levels

Equipment Powered by Internal Combustion Engines	
Type	**Noise Levels (dBA) at 50 Feet**
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Saws	71 - 82
Vibrators	68 - 82
Notes: Source: Reference Noise Levels from the Environmental Protection Agency (EPA)	

7.3.1 Construction Related Traffic

Individual projects within the scope of the Project would result in short-term noise impacts associated with construction activities. Two types of short-term noise impacts could occur during construction activities. First, construction crew commute and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on access roads leading to the site. Truck traffic associated with project construction should be limited to within the permitted construction hours, as listed in the City's Municipal Code Section 8.20.070(A). Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA Lmax at 50 ft from passing trucks, causing possible short-term intermittent annoyances, the effect on ambient noise levels would be less than 1 dBA when averaged over one hour or 24 hours. In other words, the changes in noise levels over 1 hour or 24 hours attributable to passing trucks would not be perceptible to the normal human ear. The impact is less than significant with the implementation of section 8.20.070(A) of the Municipal Code, proposed policy PS-6.9, and proposed action PS-6f.

7.3.2 On-Site Construction Activities

Site preparation phase, which includes grading and paving, tends to generate the highest noise levels since the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Site-specific construction activities associated with future development is expected to require the use of scrapers, bulldozers, motor graders, and water and pickup trucks. The maximum noise level generated by each scraper is assumed to be approximately 87 dBA Lmax at 50 ft from the scraper in operation. Each bulldozer would also generate approximately 85 dBA Lmax at 50 ft. The maximum noise level generated by the sound sources with equal strength increases the noise level by 3 dBA. Noise reduction potential will be project and site-specific. Construction noise would be an impact if construction occurred outside of the hours outlined in Section 8.20.070(A) of the Lawndale Municipal Code. Potential impacts would be site-specific, depending on the equipment used and distances to sensitive receptors. The impact is less than significant with the implementation of section 8.20.070(A) of the Municipal Code, proposed policy PS-6.9, and proposed action PS-6f.

7.4 Groundborne Vibration

The main sources of vibration in the project area are related to vehicles and construction. Typical roadway traffic, including heavy trucks, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. However, there have been cases in which heavy trucks traveling over potholes or other discontinuities in the pavement have caused vibration high enough to result in complaints from nearby residents. These types of issues typically can be resolved by smoothing the roadway surface (Caltrans 2020).

7.4.1 On-Site Construction Activities

Construction activities that produce vibration that can be felt by adjacent land uses include the use of vibratory equipment, large bulldozers, and pile drivers. The primary sources of vibration during construction are usually vibratory rollers and large bulldozers. As shown in Table 18, a vibratory roller has a peak particle velocity (inches/second) of 0.21 and a large bulldozer has a peak particle velocity of 0.089 (inches per second) at 25 feet. The use of pile driving equipment can generate a peak particle velocity of 1.5 (inches per second) depending on the size and model.

Table 18: Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (VdB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93

Table 18: Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (VdB) at 25 feet
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

The California Department of Transportation has published one of the seminal works for the analysis of ground-borne noise and vibration relating to transportation- and construction-induced vibrations and, although the Project is not subject to these regulations, it serves as a useful tool to evaluate vibration impacts (California Department of Transportation, 2013). Table 19 provides maximum PPV levels (inches/second) to be used to determine if groundborne vibration may result in damage, depending on the type of structure. When evaluated in light of the estimated groundborne vibration levels presented in Table 18, it can be determined that construction activities in the project area have the potential to result in significant impacts related to groundborne vibration associated with construction activities. These impacts can be avoided by requiring vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings as required in proposed policy PS-6.14 and proposed action PS-6k.

Table 19: Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Source
Extremely fragile historic buildings, ruins, ancient monuments	0.1	0.1
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.3
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation and Construction Vibration Guidance Manual. April 2020.

Note: transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

8.0 CEQA Analysis

The California Environmental Quality Act Guidelines (Appendix G) establishes thresholds for noise impact analysis as presented below:

(a) Would the project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise Code, or applicable standards of other agencies?

Transportation Noise Impacts

Traffic noise will be significant if levels are increased by more than 3 dBA to levels above 65 dBA CNEL in areas with sensitive uses. Compared to existing traffic noise levels, 2045 plus Project traffic volumes are expected to be up to 0.9 dBA CNEL louder than existing ambient noise levels at existing land uses and will not result in substantial increases in ambient noise along the analyzed roadways (see Table 16).

Implementation of the proposed Project will result in less than significant impacts related to exceedances of the land use compatibility criteria. ***Where existing land uses will be impacted, the impact would be less than significant. Where proposed land uses are expected to be exposed to noise levels that exceed the 65 dBA CNEL land use compatibility criteria, impacts can be mitigated to "less than significant" with implementation of proposed policies PS-6.1, PS-6.2, PS-6.3, PS-6.4, and proposed action PS-6c.***

Stationary Noise Sources

Stationary noise will be significant if it exceeds the levels outlined in the Lawndale Municipal Code as outlined in Section 4.3.3. Implementation of the Project may result in stationary noise impacts from future uses. Implementation of good land use planning and policies and actions can minimize noise impacts related to these sources by avoiding the placement of noise generating equipment near noise-sensitive land uses and where unavoidable, include design measures to the degree practical to avoid violating the noise criteria presented in Section 4.3.3. ***Stationary noise impacts can be mitigated to "less than significant" with implementation of Lawndale Noise Ordinance, proposed policies PS-6.3, PS-6.4, PS-6.8, and proposed actions PS-6c, PS-6d, and PS-6e.***

Construction Noise and Vibration

Construction noise will be significant if construction occurs outside of the hours specified in Section 8.20.070(A) of the Lawndale Municipal Code. The potential impact is site-specific and depends on the construction equipment used and distance to adjacent sensitive receptors. Implementation of the proposed Project could result in short-term noise impacts associated with construction activities. Two types of short-term noise impacts could occur during construction activities, on-site and off-site.

Construction crew commute and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on access roads leading to the site. Truck traffic associated with project construction should be limited to within the permitted construction hours,

as listed in the City's Municipal Code. Although there would be a relatively high single-event noise exposure potential at a maximum of 87 dBA Lmax at 50 ft from passing trucks, causing possible short-term intermittent annoyances, the effect on ambient noise levels would be less than 1 dBA when averaged over one hour or 24 hours. In other words, the changes in noise levels over 1 hour or 24 hours attributable to passing trucks would not be perceptible to the normal human ear. ***Therefore, short-term construction-related impacts associated with worker commute and equipment transport on local streets leading to the project site would result in a less than significant impact on noise-sensitive receptors along the access routes. No mitigation is required.***

The site preparation phase of on-site construction activities, which includes grading and paving, tends to generate the highest noise levels since the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Site-specific construction activities associated with future development are expected to require the use of scrapers, bulldozers, motor graders, and water and pickup trucks. The maximum noise level generated by each scraper is assumed to be approximately 87 dBA Lmax at 50 ft from the scraper in operation. Each bulldozer would also generate approximately 85 dBA Lmax at 50 ft. The maximum noise level generated by the sound sources with equal strength increases the noise level by 3 dBA. Noise reduction potential will be Project and site-specific. ***Implementation of Section 8.20.070(A) of the Municipal Code, proposed policy PS-6.9, and proposed action PS-6f during site-specific projects will reduce the impact to less than significant.***

b) Generate excessive ground-borne vibration or ground-borne noise levels?
Construction vibration within the Project Area is not anticipated to be significant unless an individual development uses pile driving or vibratory rollers. These impacts can be avoided by requiring vibration impact studies when construction utilizes pile drivers within 200 feet of existing buildings or vibratory rollers within 50 feet of existing buildings. ***This impact would be less than significant with the implementation of proposed policy PS-6.14 and action PS-6k.***

9.0 References

American National Standards Institute (ANSI)

Specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

California, State of, Building Standards Commission

2019 California Uniform Building Code (UBC), Title 24.
2019 Green Code Section 5.507.4.3 (2019)

California Department of Transportation (Caltrans)

2013 Technical Noise Supplement to the Traffic Noise Analysis Protocol.
2020 Transportation and Construction Vibration Guidance Manual. April.
2021 Caltrans Traffic Counts https://dot.ca.gov/programs/traffic-operations/census

California Office of Noise Control

2017 Guidelines for the Preparation and Content of Noise Elements of the General Plan. February.

Environmental Protection Agency (EPA)

1974 Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Prepared by the EPA, Office of Noise Abatement and Control.

Federal Interagency Committee on Noise

1992 Federal Agency Review of Selected Airport Noise Analysis Issues. August.

Federal Transit Administration

2006 Transit Noise and Vibration Impact Assessment. Typical Construction Equipment Vibration Emissions. FTAVA-90-1003-06.

Lawndale, City of

1992 General Plan.
City of Lawndale Municipal Code.

Office of Planning and Research, State of California

2017 Office of Planning and Research, General Plan Guidelines.

Appendix A:

SoundPLAN Data

MPH	KMH	Road width	Lane width	SP9 Lane	Name
35	56.32704	70	35	10.668	1. Inglewood Ave between Marine Ave & 153rd Pl
35	56.32704	60	30	9.144	2. Inglewood Ave between I-405 S Entrance & Manhattan Beach Blvd
40	64.37376	80	40	12.192	3. Inglewood Ave between Manhattan Blvd & Artesia Blvd
40	64.37376	80	40	12.192	4. Manhattan Beach Blvd between Inglewood Ave & Hawthorne Blvd
35	56.32704	75	37.5	11.43	5. Artesia Blvd between Inglewood Ave & Grevillea Ave
35	56.32704	140	70	21.336	6. Hawthorne Blvd between Marine Ave & Manhattan Beach Blvd
35	56.32704	140	70	21.336	7. Hawthorne Blvd between Manhattan Beach Blvd & 160th St
35	56.32704	140	70	21.336	8. Hawthorne Blvd between 162nd St & 166th St
35	56.32704	140	70	21.336	9. Hawthorne Blvd between 169th St & Redondo Beach Blvd
40	64.37376	80	40	12.192	10. Rosecrans Ave between Hawthorne Blvd & Prairie Ave
40	64.37376	75	37.5	11.43	11. Redondo Beach Blvd between Hawthorne Blvd & Prairie Ave
40	64.37376	75	37.5	11.43	12. Manhattan Beach Blvd between Freeman Ave & Prairie Ave
40	64.37376	75	37.5	11.43	13. Prairie Ave between Marine Ave & Manhattan Beach Blvd
35	56.32704	65	32.5	9.906	14. Manhattan Beach Blvd between Prairie Ave & Crenshaw Blvd
35	56.32704	70	35	10.668	15. Crenshaw Blvd between Marine Ave & Manhattan Beach Blvd
65	104.6074	120	60	18.288	16. San Diego Freeway West of Hawthorne Blvd
65	104.6074	120	60	18.288	17. San Diego Freeway East of Hawthorne Blvd

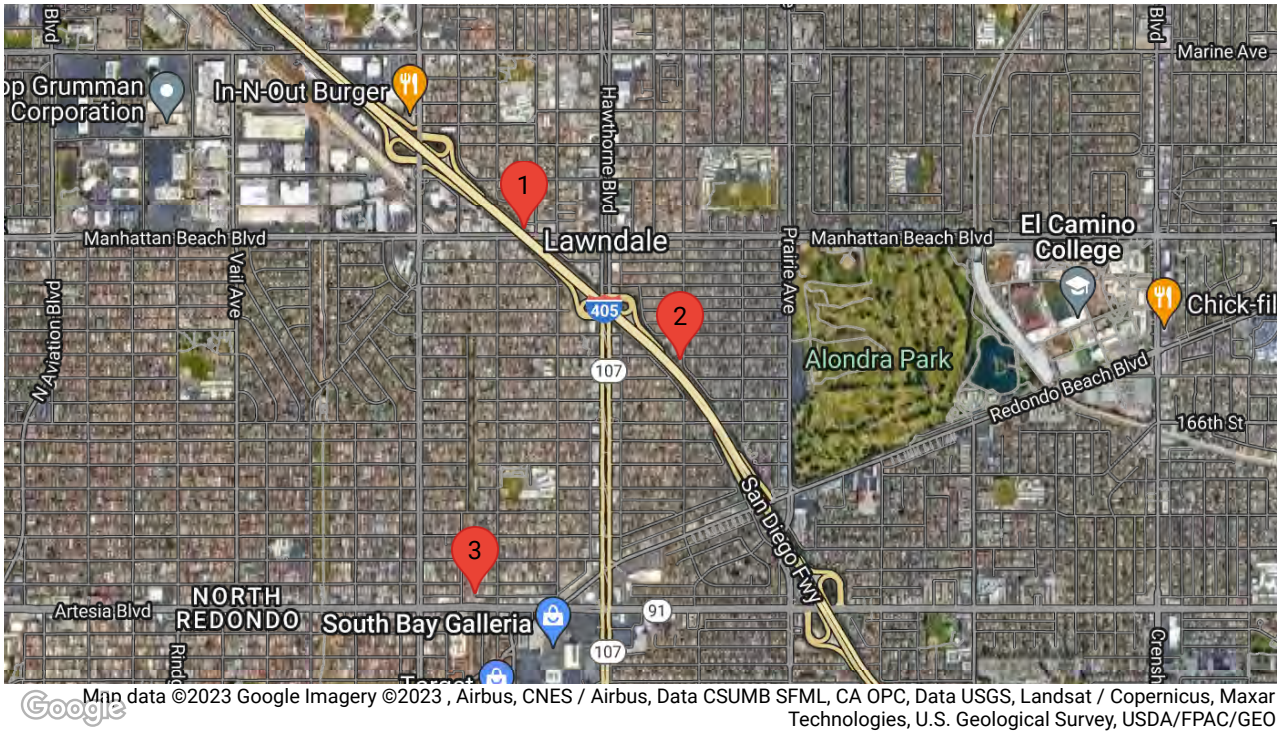
MPH	KMH	Road width	Lane width	SP9 Lane	Name
35	56.32704	150	75	22.86	Hawthorne North Rosecrans to Marine
35	56.32704	55	27.5	8.382	Redondo Beach Artesia to Hawthorne
40	64.37376	60	30	9.144	Marine Ave I405 to Crenshaw Blvd
40	64.37376	75	37.5	11.43	Prarie Ave Rosecrans to Marine
40	64.37376	75	37.5	11.43	Prarie Ave Manhattan Beach to Redondo Beach
40	64.37376	75	37.5	11.43	Rosecrans Inglewood to Hawthorne
25	40.2336	55	27.5	8.382	Inglewood Rosecrans to Marine

Appendix B:

Noise Measurement Data and Field Sheets

24-Hour Continuous Noise Measurement Datasheet

Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Observations:**	
Project: #/Name:	0462-2019-010	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH.	
Site Address/Location:	Manhattan Beach Blvd & I405		
Date:	05/25/2023		
Field Tech/Engineer:	Jason Schuyler/ Claire Pincock		
Sound Meter:	Piccolo 2, Soft dB	**SN:** P0222022803	
Settings:	A-weighted, slow, 1-min, 24-hour duration		
Site Id:	LT1, LT2, LT3		



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: Manhattan Beach Blvd & I405

Site Id: LT1, LT2, LT3

Figure 1: LT1

Figure 2: LT2

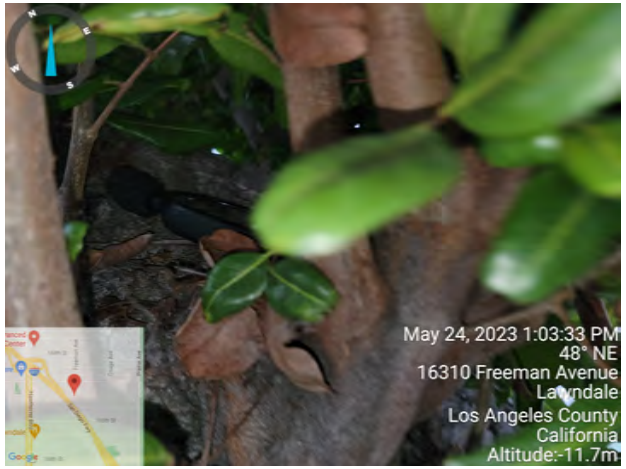
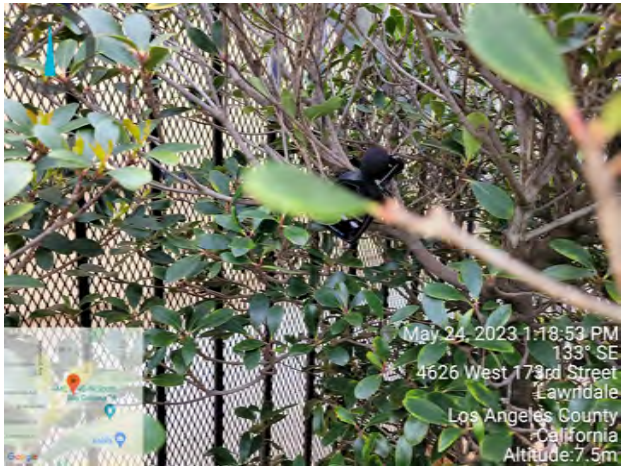


Figure 3: LT3



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Hill	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid	**Noise Source(s) w/ Distance:**
Site Id:	LT1	60°F during the day, Overcast winds 1-3 MPH		Road and commercial noise
		Ground Type:	Grass	

Table 1: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
5/24/2023	1:00 PM	2:00 PM	73.9	84.7	69.2	75.6	74.7	74.1	73.8	73.2
5/24/2023	2:00 PM	3:00 PM	73.4	81.5	68.4	74.4	74	73.7	73.4	72.7
5/24/2023	3:00 PM	4:00 PM	73.2	80.9	67.5	74.3	73.9	73.5	73.2	72.5
5/24/2023	4:00 PM	5:00 PM	72.7	85.9	64.2	75.4	73.9	73	72.7	70.9
5/24/2023	5:00 PM	6:00 PM	72.5	81.9	68	73.6	73.5	72.9	72.6	71.6
5/24/2023	6:00 PM	7:00 PM	73.3	85.1	66.4	74.7	74	73.5	73.2	72.7
5/24/2023	7:00 PM	8:00 PM	73.5	86.1	68.2	75.4	74.3	73.7	73.4	72.4
5/24/2023	8:00 PM	9:00 PM	72.7	83	66.6	73.9	73.7	73.1	72.7	71.6
5/24/2023	9:00 PM	10:00 PM	72.3	83.4	66.2	73.9	73.5	72.6	72.1	71.4
5/24/2023	10:00 PM	11:00 PM	71.1	81	63	72.6	72.3	71.6	71	69.9
5/24/2023	11:00 PM	12:00 AM	69.5	78.7	61.4	71.2	70.8	70	69.5	68.2
5/25/2023	12:00 AM	1:00 AM	68.2	83	55.3	70.5	69.8	69	68.1	65.9
5/25/2023	1:00 AM	2:00 AM	66.7	82.2	53.8	69.8	68.5	67.6	66.3	64.3
5/25/2023	2:00 AM	3:00 AM	66.6	78.5	52.1	69.3	68.6	67.3	66.4	64.6
5/25/2023	3:00 AM	4:00 AM	68.9	79.9	52.3	71.2	71	69.9	68.8	65.4
5/25/2023	4:00 AM	5:00 AM	72.4	80.6	59.5	74.6	74.3	73.3	72.5	69.7
5/25/2023	5:00 AM	6:00 AM	73.9	81.2	65.3	75.2	74.8	74.5	74	72.4
5/25/2023	6:00 AM	7:00 AM	70.6	86.1	63.2	72.6	72	71.5	70.7	68.1
5/25/2023	7:00 AM	8:00 AM	70.2	83.1	63.9	71.8	71.2	70.9	70.2	68.3
5/25/2023	8:00 AM	9:00 AM	69.6	77.7	63.9	71.7	71.4	70.5	69.4	67.6
5/25/2023	9:00 AM	10:00 AM	70.3	77.6	63.5	72.7	72.1	70.9	70.2	68.6
5/25/2023	10:00 AM	11:00 AM	73.8	79.4	62.9	74.7	74.5	74.3	74	72
5/25/2023	11:00 AM	12:00 PM	74	81.3	69.9	75	74.6	74.3	74	73.4
5/25/2023	12:00 PM	1:00 PM	73.7	80.7	69.7	74.6	74.3	74	73.8	73

	DNL	77.3

MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: Manhattan Beach Blvd & I405

Site Id: LT2

Site Topo: Buildings 1-2 stories

Meteorological Cond.: Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH

Ground Type: Buildings and asphalt

Day: 2 of 3

Noise Source(s) w/ Distance: road noise and residential noise

Table 2: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
5/24/2023	1:00 PM	2:00 PM	72.1	83.5	63.1	73.2	73	72.4	72.2	71.5
5/24/2023	2:00 PM	3:00 PM	71.6	81.4	67.4	72.5	72.2	72	71.5	70.7
5/24/2023	3:00 PM	4:00 PM	71.5	87.2	66.6	74.3	72.4	71.7	71.3	70.4
5/24/2023	4:00 PM	5:00 PM	70.5	85.6	62.2	72.5	71.8	71.1	70.6	68.6
5/24/2023	5:00 PM	6:00 PM	70	80.3	65.8	71.3	71	70.5	70	69.2
5/24/2023	6:00 PM	7:00 PM	70.7	79	66.8	72.1	71.5	70.9	70.6	69.8
5/24/2023	7:00 PM	8:00 PM	71.2	82.7	67.3	73	71.7	71.5	71.1	70.3
5/24/2023	8:00 PM	9:00 PM	70.2	84.1	66.5	71.4	70.8	70.4	70.1	69.2
5/24/2023	9:00 PM	10:00 PM	68.7	79.3	64.4	70.8	69.8	69	68.6	67.9
5/24/2023	10:00 PM	11:00 PM	67.7	72.9	62.3	69.2	68.5	68.1	67.7	66.7
5/24/2023	11:00 PM	12:00 AM	65.9	79.1	60	67.7	67	66.4	65.8	64.4
5/25/2023	12:00 AM	1:00 AM	64.4	74.6	57.8	66.3	65.5	65	64.3	62.8
5/25/2023	1:00 AM	2:00 AM	62.8	72.3	54.7	64.8	64.2	63.1	62.7	61.4
5/25/2023	2:00 AM	3:00 AM	62.3	69.9	53.2	64.1	63.7	63	62.4	60.6
5/25/2023	3:00 AM	4:00 AM	65	79.1	54.2	67	66.7	66.2	65	61.9
5/25/2023	4:00 AM	5:00 AM	69.1	80.9	59.7	71.4	70.7	70	69.1	66
5/25/2023	5:00 AM	6:00 AM	70.8	75	64.2	72.1	71.7	71.4	70.8	69.5
5/25/2023	6:00 AM	7:00 AM	64.9	79.5	58.3	67.3	66.9	65.3	64.4	63.2
5/25/2023	7:00 AM	8:00 AM	76.2	92	61.3	84.1	82.3	72.2	66.7	64.6
5/25/2023	8:00 AM	9:00 AM	75.2	89.1	61.7	82.1	81.4	73.2	66.5	64.8
5/25/2023	9:00 AM	10:00 AM	69.4	86.4	60.6	74.4	73.6	70.9	66.3	64.6
5/25/2023	10:00 AM	11:00 AM	72.6	88.3	68.4	76.7	73	72.7	72.3	71.5
5/25/2023	11:00 AM	12:00 PM	71.9	77.7	69	72.9	72.6	72.3	71.9	71.2
5/25/2023	12:00 PM	1:00 PM	71.6	81	67.8	73.7	72.7	71.7	71.4	70.7

	DNL	74.4

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	plateau on a hill top	**Day:** 3 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH	**Noise Source(s) w/ Distance:** Light rail and residential noise
Site Id:	LT3	**Ground Type:**	buildings 1-2 story	

Table 3: Baseline Noise Measurement Summary

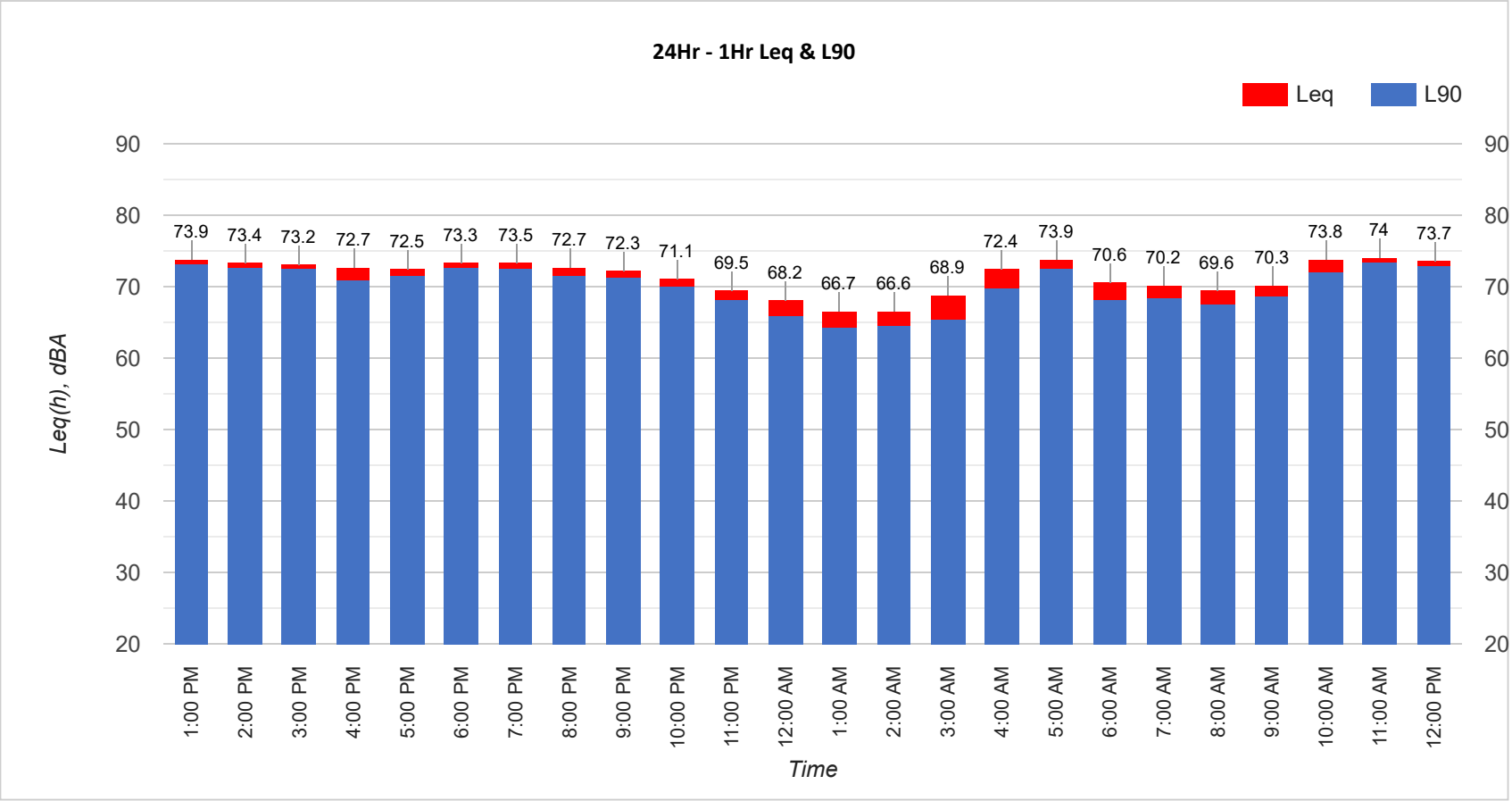
Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
5/31/2023	10:30 AM	11:30 AM	69.5	94.5	45.9	78.1	56.4	55	53.9	51.6
5/31/2023	11:30 AM	12:30 PM	58	79.1	47.7	63.6	62	58.8	56.3	52.5
5/31/2023	12:30 PM	1:30 PM	54.9	73	47.1	58.2	56.3	55.2	54.2	51.6
5/31/2023	1:30 PM	2:30 PM	55.2	77	47	59.6	57.7	56	54.1	52
5/31/2023	2:30 PM	3:30 PM	68.8	98.3	48.1	76.1	62.8	56.3	54.6	52.9
5/31/2023	3:30 PM	4:30 PM	55.7	69.5	47.4	57.8	57	56.1	55.3	53.2
5/31/2023	4:30 PM	5:30 PM	59.9	89.3	48.8	69.4	61.5	57.2	55.1	53.2
5/31/2023	5:30 PM	6:30 PM	56.5	75.6	47.4	60.7	58.3	56.4	54.8	51.8
5/31/2023	6:30 PM	7:30 PM	65.2	91.3	45.5	75.6	64.4	55.9	53.7	50.9
5/31/2023	7:30 PM	8:30 PM	52.9	69.8	42.8	57.9	56.5	52.9	52.1	49.6
5/31/2023	8:30 PM	9:30 PM	51.2	70.4	41.6	55.8	53.3	51.5	50.4	48.2
5/31/2023	9:30 PM	10:30 PM	50	69.8	38.1	55.3	52.8	49.5	48.5	46.4
5/31/2023	10:30 PM	11:30 PM	47.7	67	37.2	50.2	49.1	48.4	47.3	44
5/31/2023	11:30 PM	12:30 AM	46.7	67.6	35.3	52.7	50.7	47	44.9	42.6
6/1/2023	12:30 AM	1:30 AM	44.7	66.9	34	50.5	46.7	44.5	43	40.6
6/1/2023	1:30 AM	2:30 AM	43.1	64.2	32.5	48.8	45.2	42.9	41	34.8
6/1/2023	2:30 AM	3:30 AM	41.5	52.8	32.5	45.6	44.6	43.3	40.8	35.4
6/1/2023	3:30 AM	4:30 AM	42.1	58.3	33.4	47	44.7	43.1	41.6	36.4
6/1/2023	4:30 AM	5:30 AM	45.4	62	33.6	49	47.9	46.8	44.8	40.6
6/1/2023	5:30 AM	6:30 AM	57.4	80.5	36.8	67.2	57.8	51.7	49.7	45.8
6/1/2023	6:30 AM	7:30 AM	52.7	68	37.9	56.5	55.1	53.5	52.4	49.6
6/1/2023	7:30 AM	8:30 AM	52.6	69.3	44.2	56.7	55.3	53.4	52.2	49.1
6/1/2023	8:30 AM	9:30 AM	53.4	71.1	42.7	59	55.9	54	52.8	49.8
6/1/2023	9:30 AM	10:30 AM	53.1	72.1	45.5	57.5	54.9	53.9	52.6	50.1

	DNL	61.4

MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

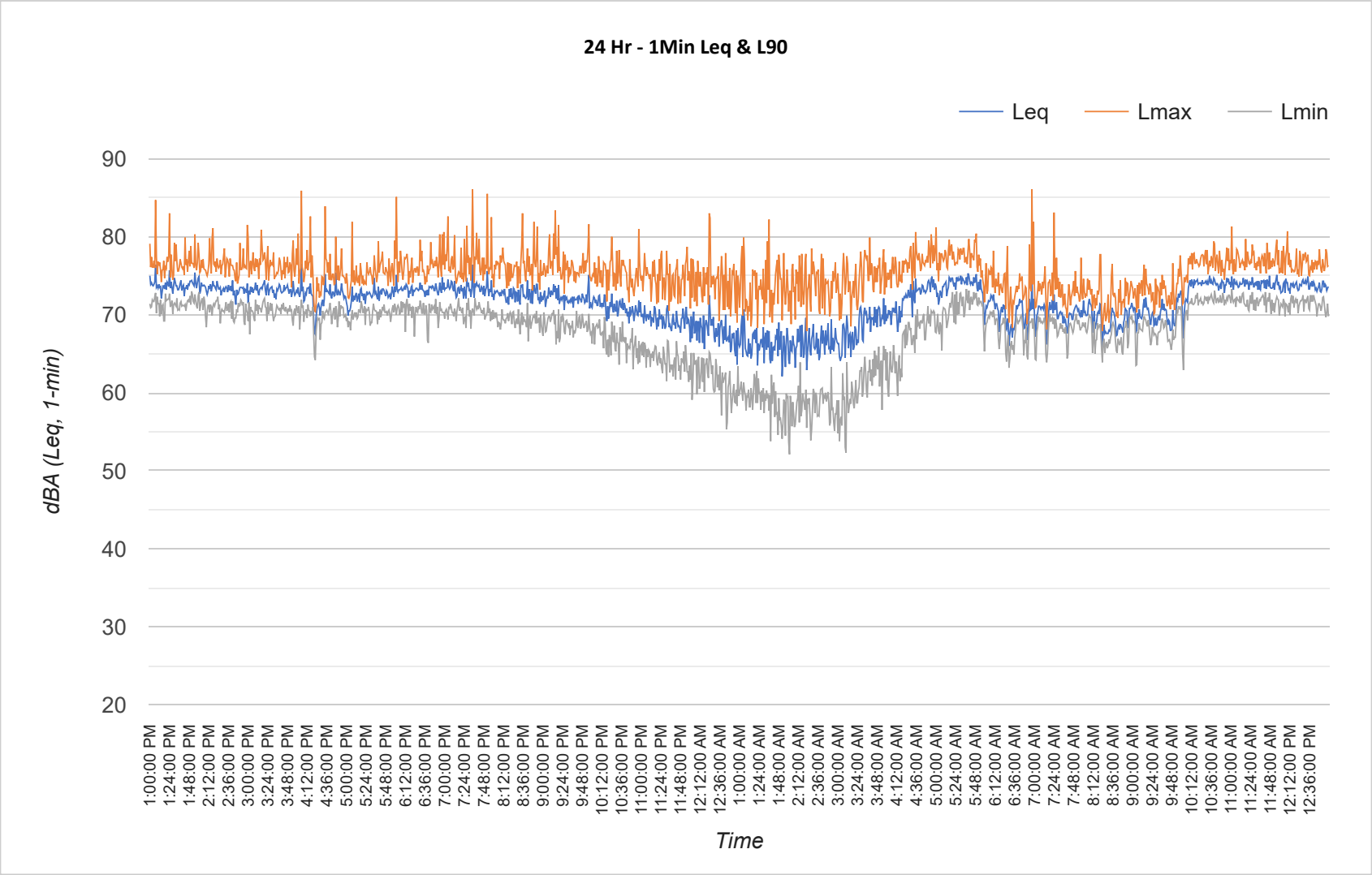
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Hill	**Day:** 1 of 3	
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid	**Noise Source(s) w/ Distance:**	
Site Id:	LT1	60°F during the day, Overcast winds 1-3 MPH		Road and commercial noise	
		Ground Type:	Grass		



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

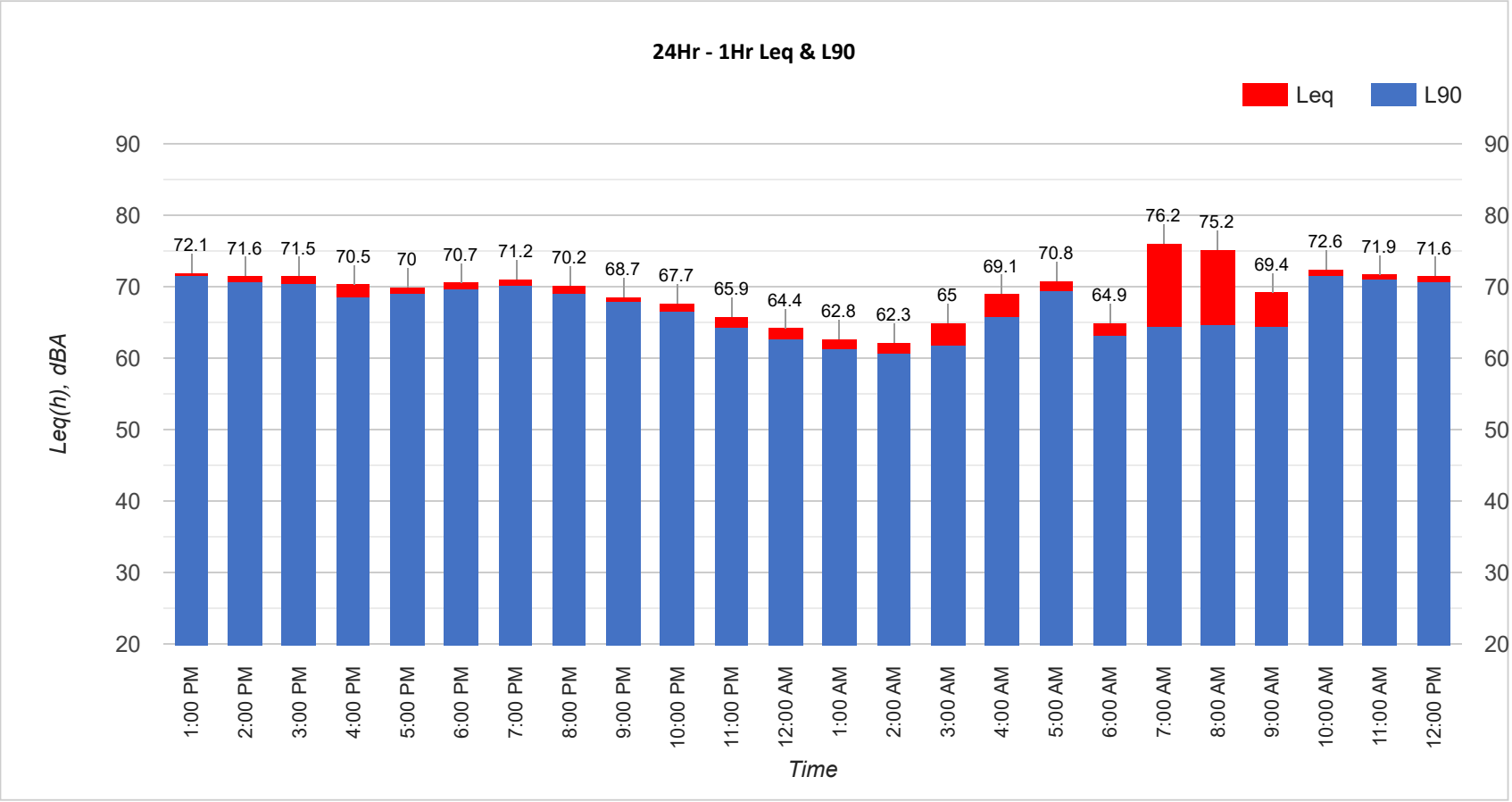
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Hill	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid	**Noise Source(s) w/ Distance:**
Site Id:	LT1		60°F during the day, Overcast winds 1-3 MPH	Road and commercial noise
		Ground Type:	Grass	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

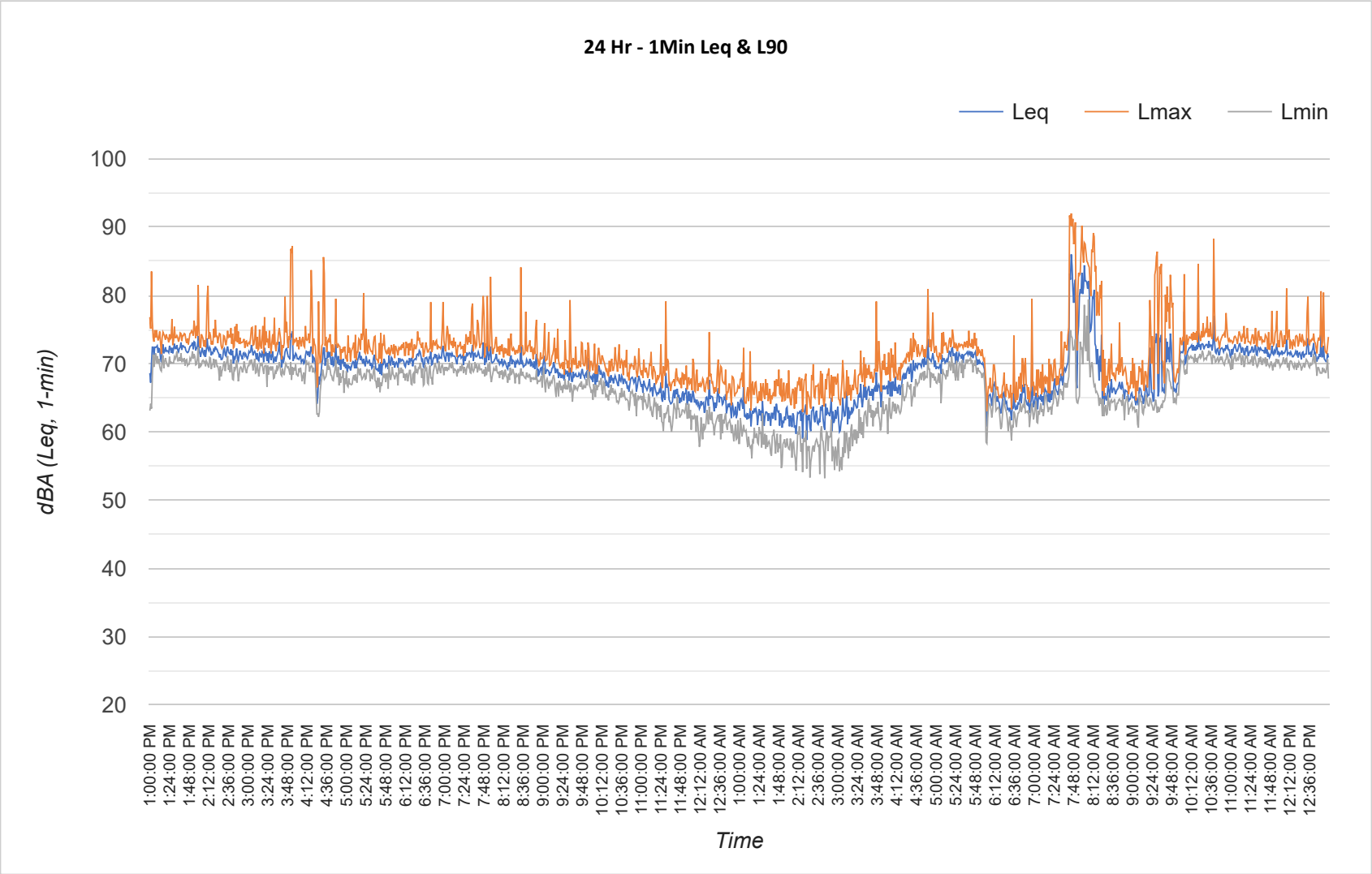
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH	**Noise Source(s) w/ Distance:** road noise and residential noise
Site Id:	LT2	**Ground Type:**	Buildings and asphalt	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

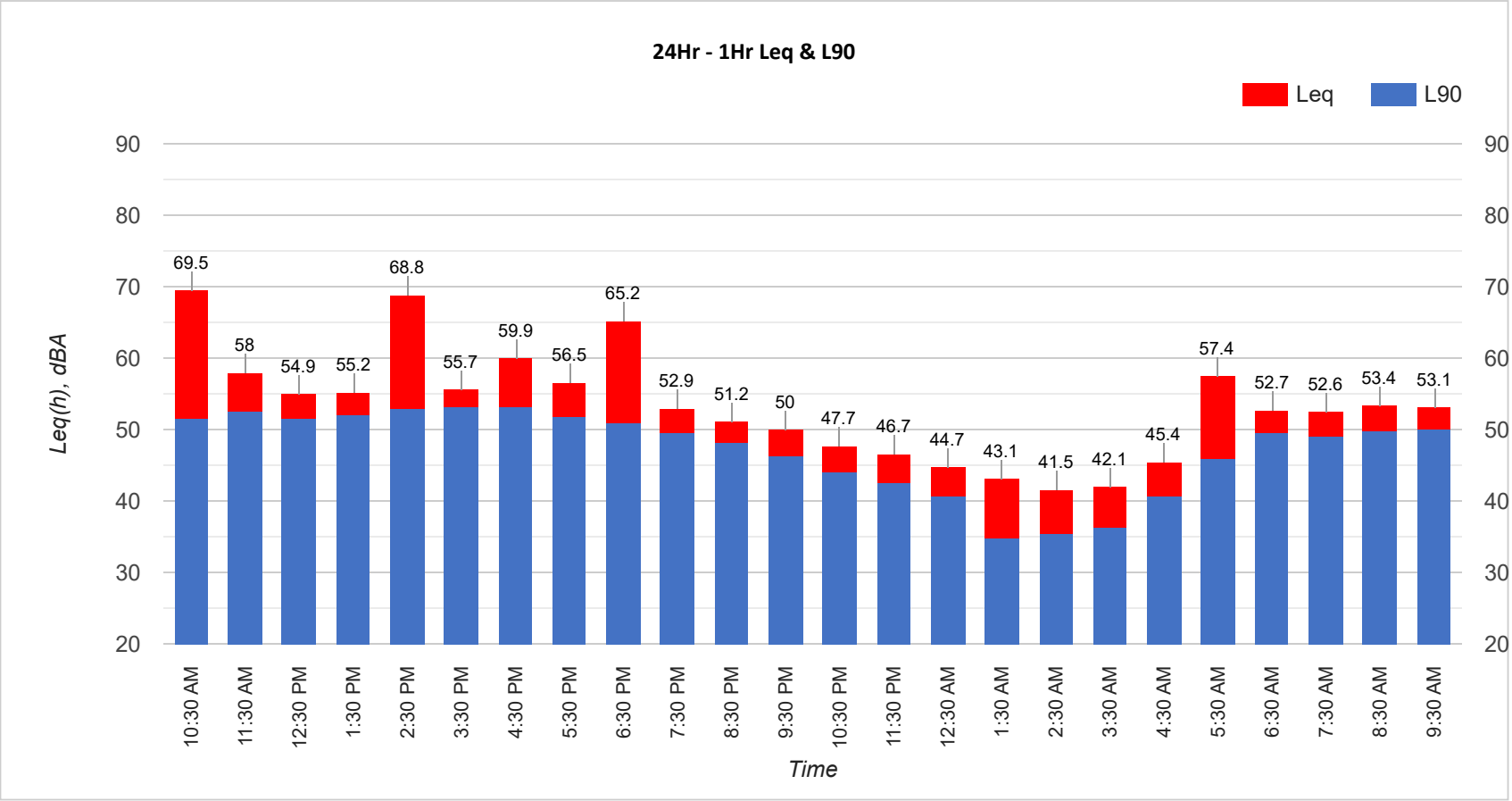
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH	**Noise Source(s) w/ Distance:** road noise and residential noise
Site Id:	LT2	**Ground Type:**	Buildings and asphalt	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

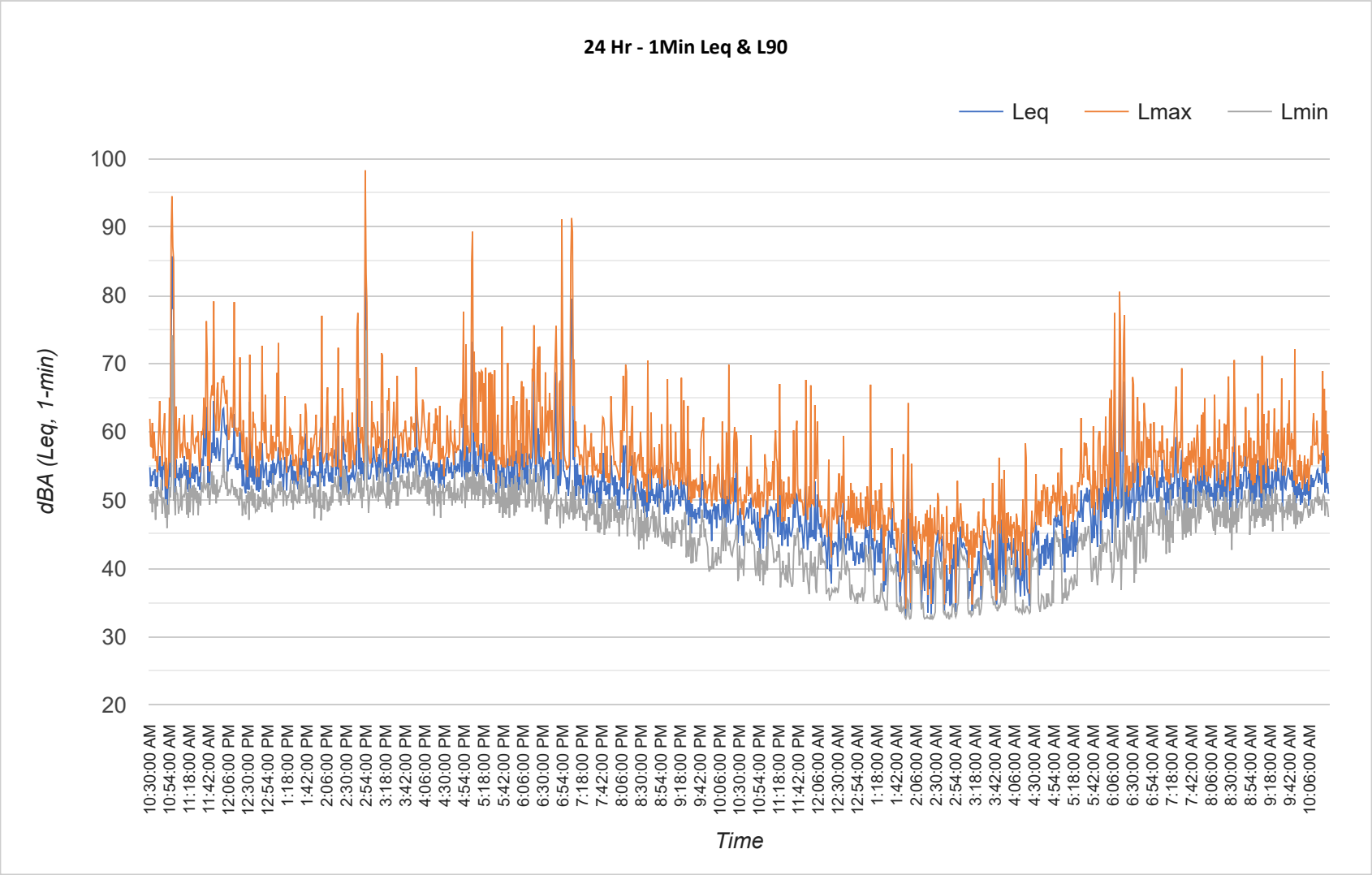
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	plateau on a hill top	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH	**Noise Source(s) w/ Distance:** Light rail and residential noise
Site Id:	LT3	**Ground Type:**	buildings 1-2 story	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	plateau on a hill top	**Day:** 1 of 3
Site Address/Location:	Manhattan Beach Blvd & I405	**Meteorological Cond.:**	Temps in the Mid 60°F during the day, Overcast winds 1-3 MPH	**Noise Source(s) w/ Distance:** Light rail and residential noise
Site Id:	LT3	**Ground Type:**	buildings 1-2 story	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Project: #/Name: 0462-2019-010

Site Address/Location: LawnDale

Date: 11/30/-0001

Field Tech/Engineer: Jason Schuyler/ Claire Pincock

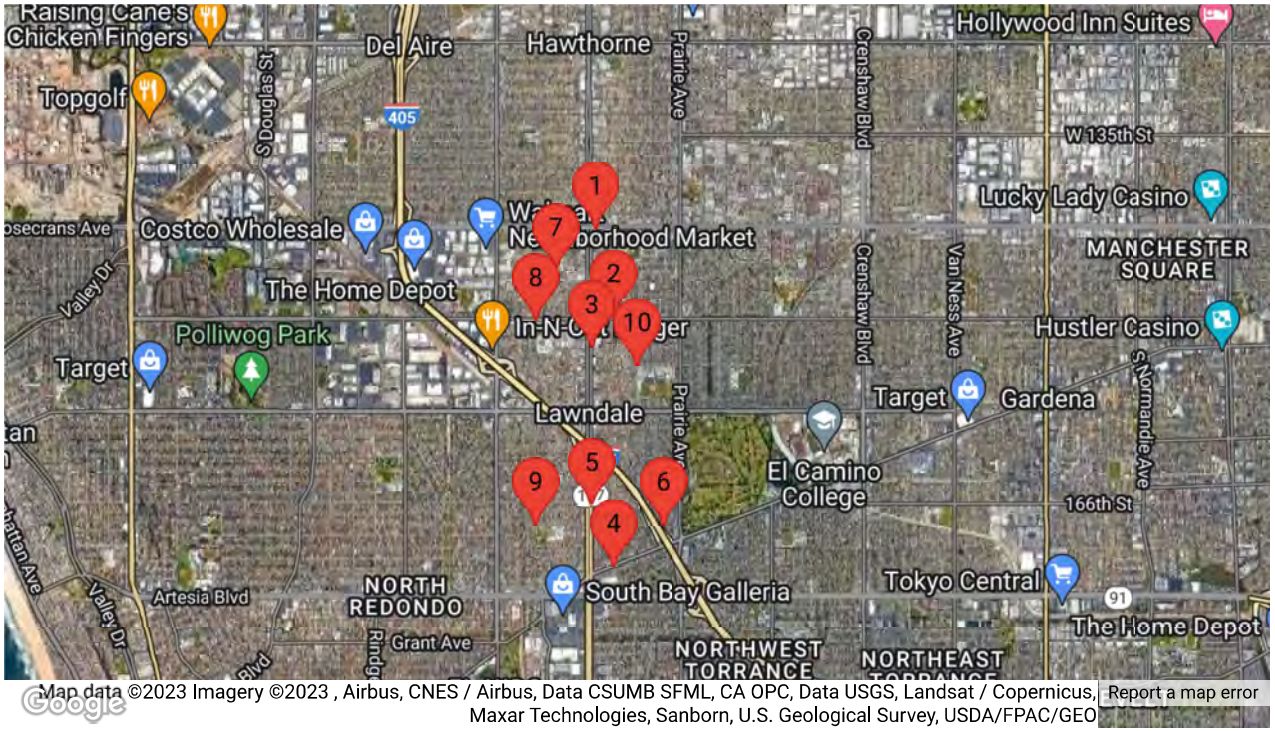
Site Observations:

Calibrated first thing in the morning. Overcast ,64F° , winds 1-7MPH. The primary noise source is traffic.

Sound Meter: XL2, NTI **SN:** A2A-08562-E0

Settings: A-weighted, slow, 1-sec, 15-minute interval

Site Id: ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: LawnDale

Site Id: ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9

Figure 1: ST1

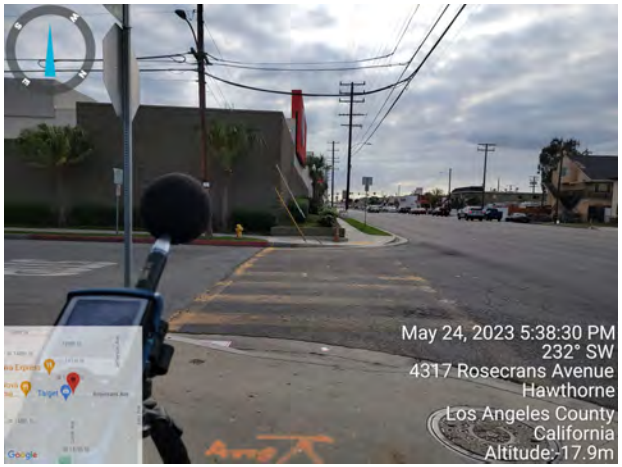


Figure 2: ST2

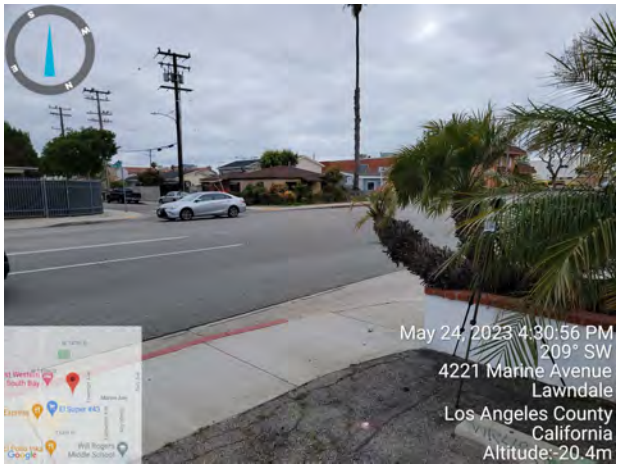


Figure 3: ST3

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: LawnDale

Site Id: ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9

Figure 4: ST4

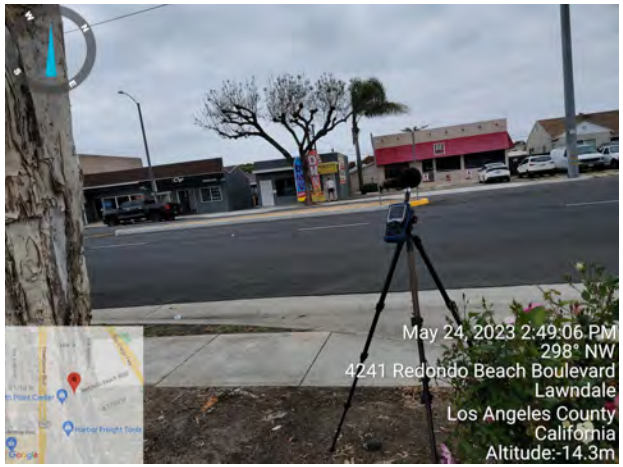


Figure 5: ST5

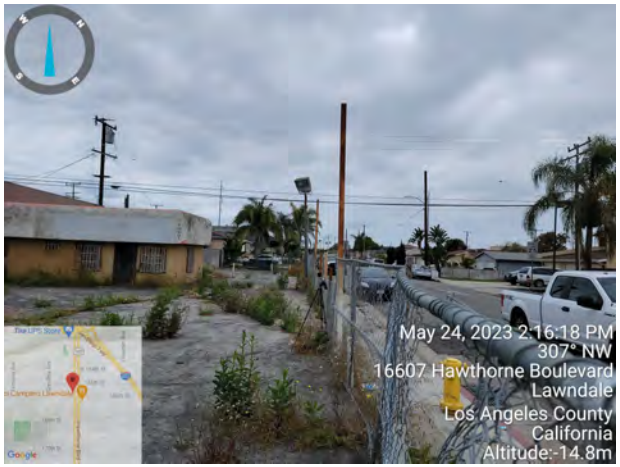


Figure 6: ST6

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: LawnDale

Site Id: ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9

Figure 7: ST7

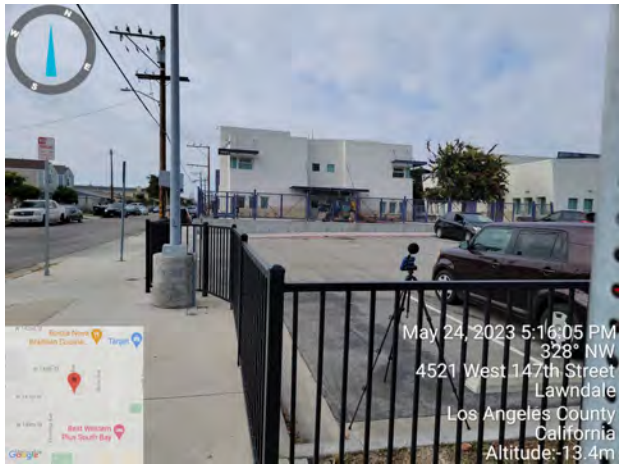


Figure 8: ST8

Figure 9: ST9

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	Lawndale Hawthorne GP & Specific Plan Update
Site Address/Location:	LawnDale
Site Id:	ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9

Figure 10: ST10

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name: Lawndale Hawthorne GP & Specific Plan Update

Site Address/Location: LawnDale

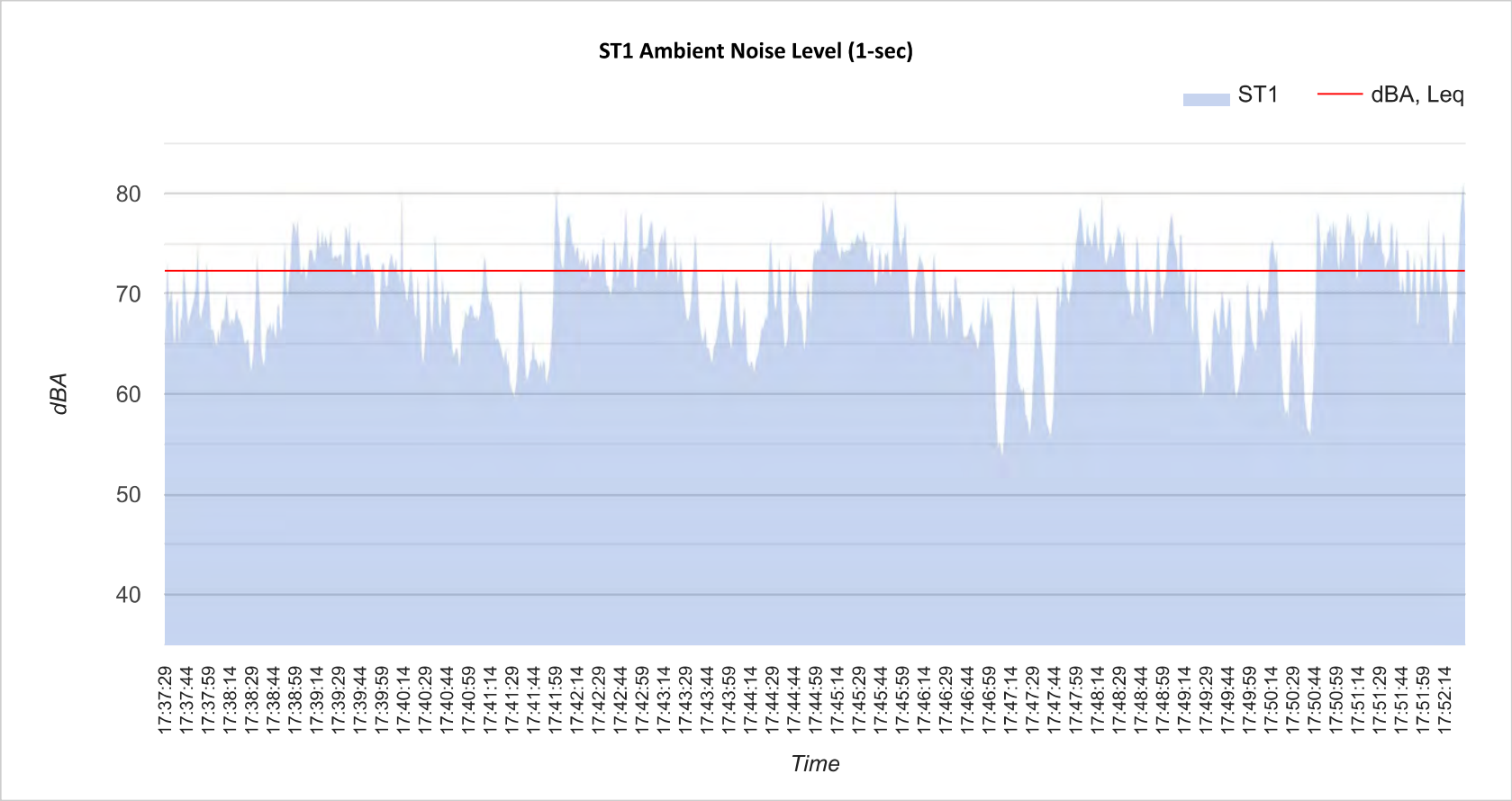
Site Id: ST1, ST10, ST2, ST3, ST4, ST5, ST6, ST7, ST8, ST9

Table 1: Baseline Noise Measurement Summary

Location	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
ST1	5:37 PM	5:52 PM	72.3	80.4	54.4	77.9	76.3	73.9	70.7	63.4
ST10	3:42 PM	3:57 PM	59.9	78.2	47.2	68.8	63	57.5	53.2	48.9
ST2	4:25 PM	4:40 PM	69.7	82.7	53.7	74.9	73.1	70.9	68.3	61.8
ST3	4:03 PM	4:18 PM	67.6	75.9	55.0	73.6	72.2	70.1	63.9	57.1
ST4	2:48 PM	3:03 PM	64.9	78.5	49.0	71	69	66.2	62.8	55
ST5	12:43 PM	12:58 PM	66.4	79.4	51.1	72.2	70.6	67.9	64.4	55.7
ST6	3:15 PM	3:30 PM	60.4	66.5	57.0	63.5	61.9	60.8	60.1	58.9
ST7	5:14 PM	5:29 PM	57.8	75.7	47.5	66	60.7	56.1	52.9	49.3
ST8	4:50 PM	5:05 PM	66	82.7	50.6	71.8	70.1	66.8	62.8	56.3
ST9	1:27 PM	1:42 PM	57.4	72.8	42.4	64.3	61.3	57.9	54	45.7

15-Minute Continuous Noise Measurement Datasheet - Cont.

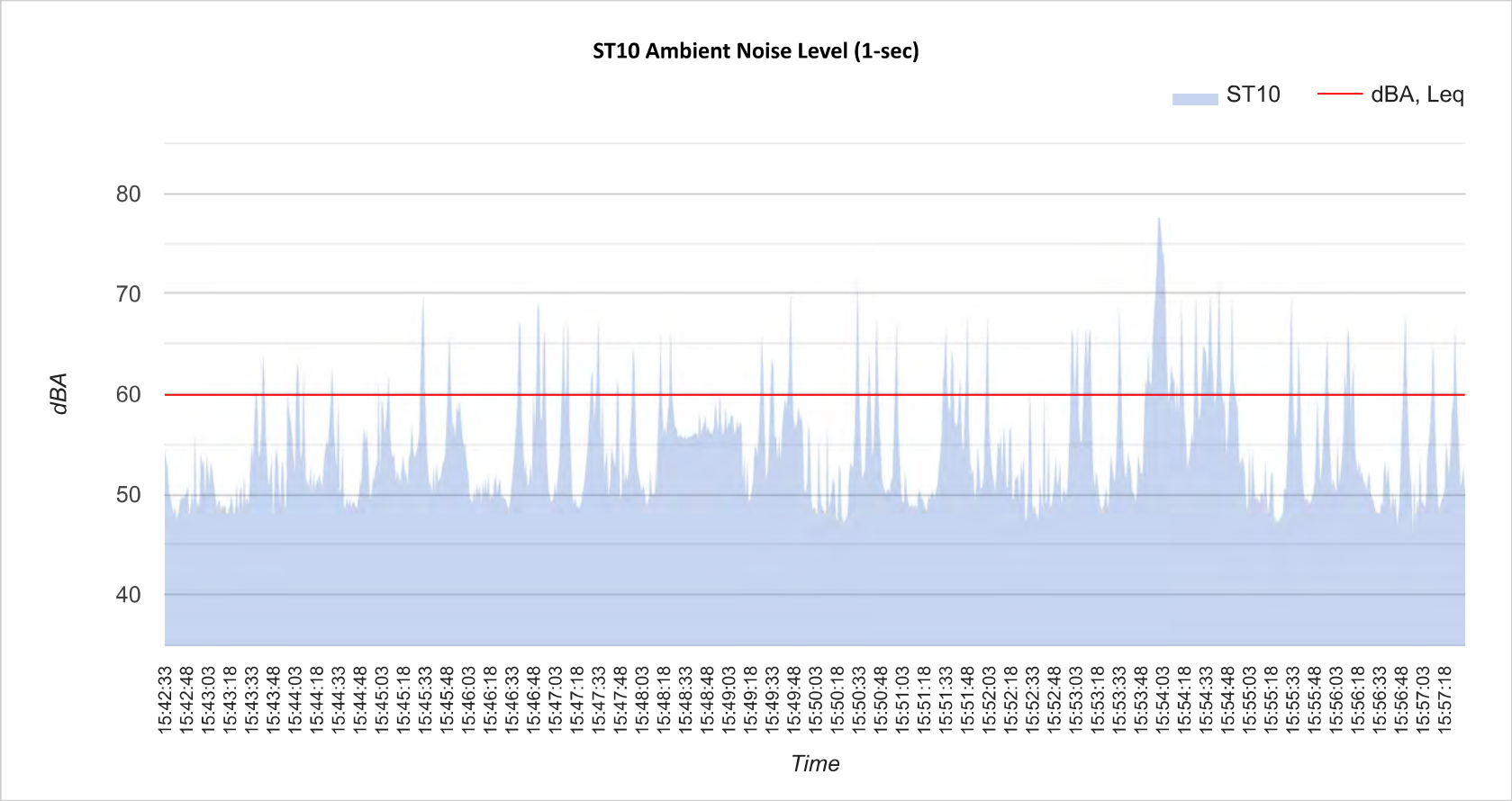
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	Road and residential noise
Site Id:	ST1	**Ground Type:**	buildings and asvault	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

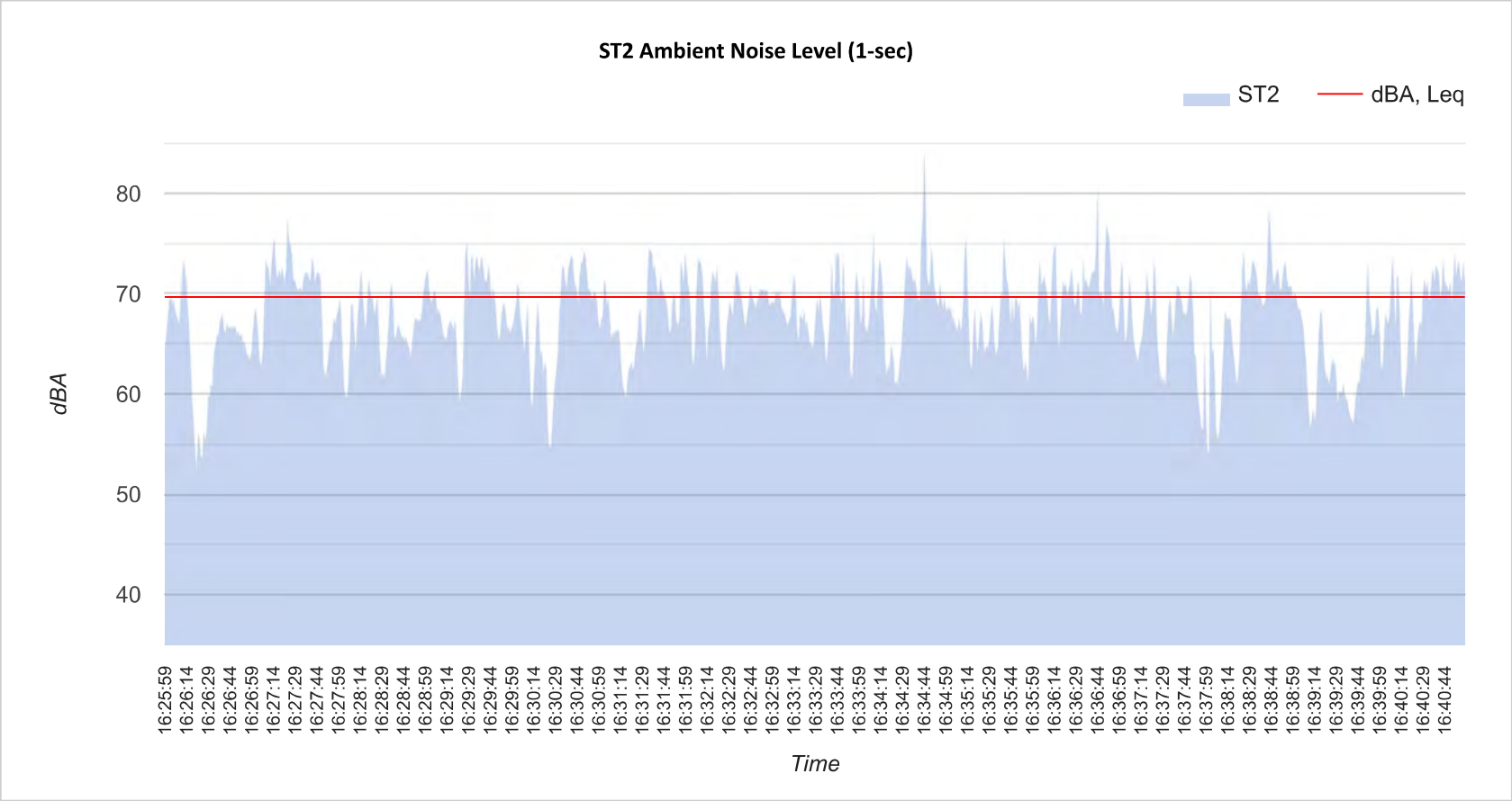
Project Name:	Lawndale Hawthorne GP & Specific Plan	**Site Topo:**	Buildings 1-2 stories tall	**Noise Source(s) w/ Distance:**
Update		**Meteorological Cond.:**	64F Winds 0-1MPH	Road Noise and School/ residential noise
Site Address/Location:	LawnDale	**Ground Type:**	buildings and asphalt opening onto school	
Site Id:	ST10			



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

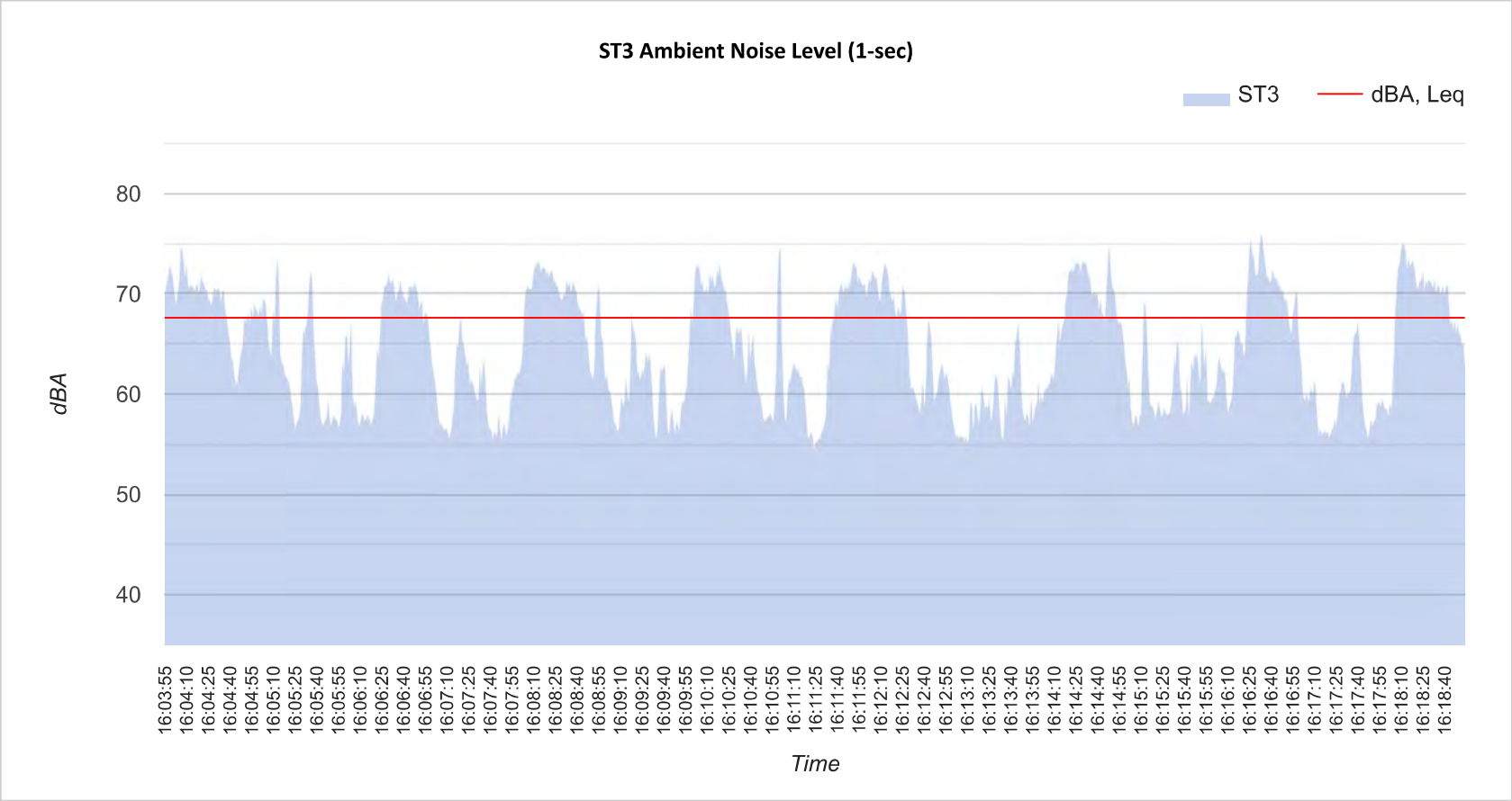
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	road noise and residential noise
Site Id:	ST2	**Ground Type:**	buildings and asphalt	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

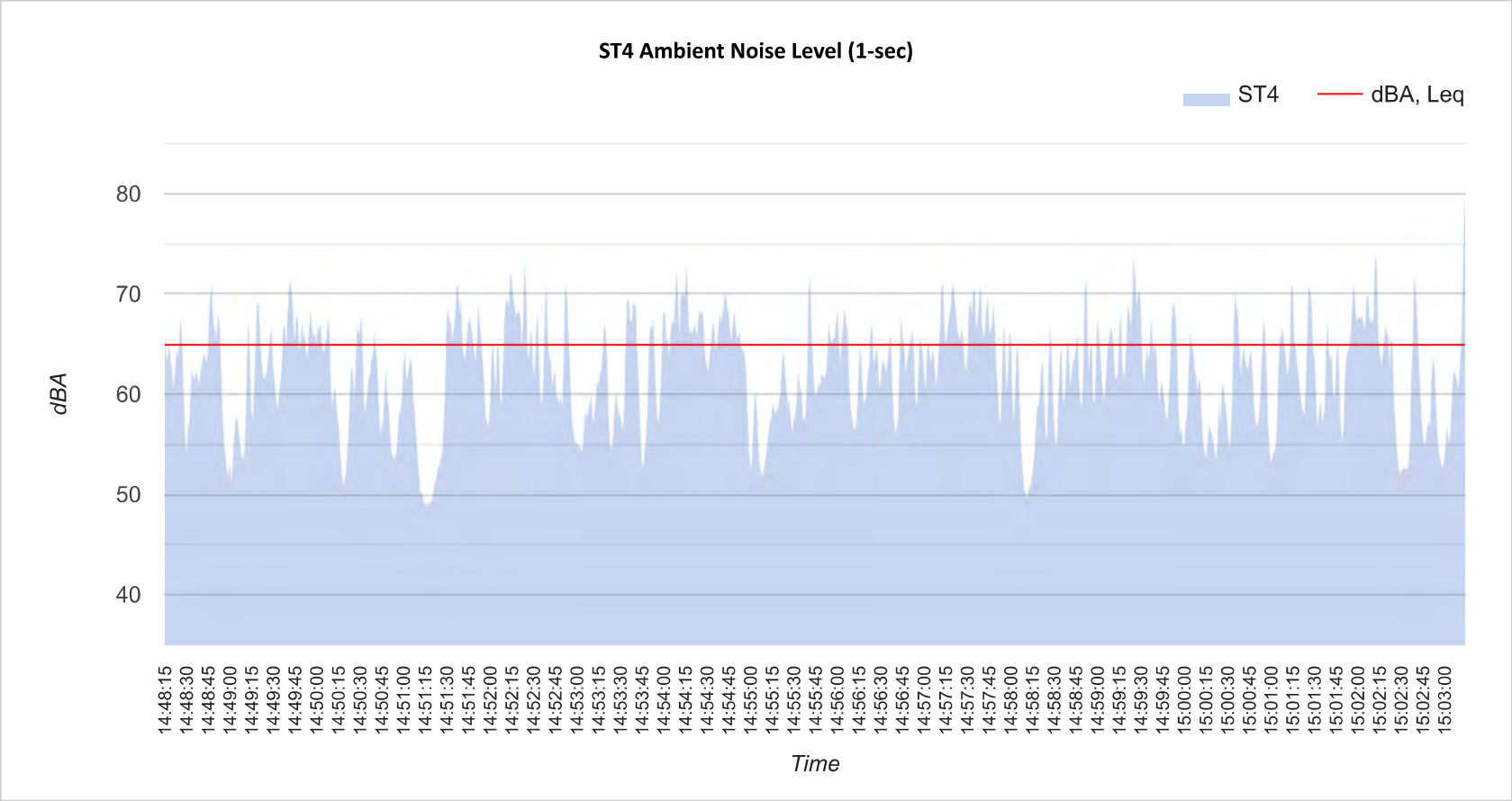
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall site	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	Road and commercial noise
Site Id:	ST3	**Ground Type:**	buildings and asphalt	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

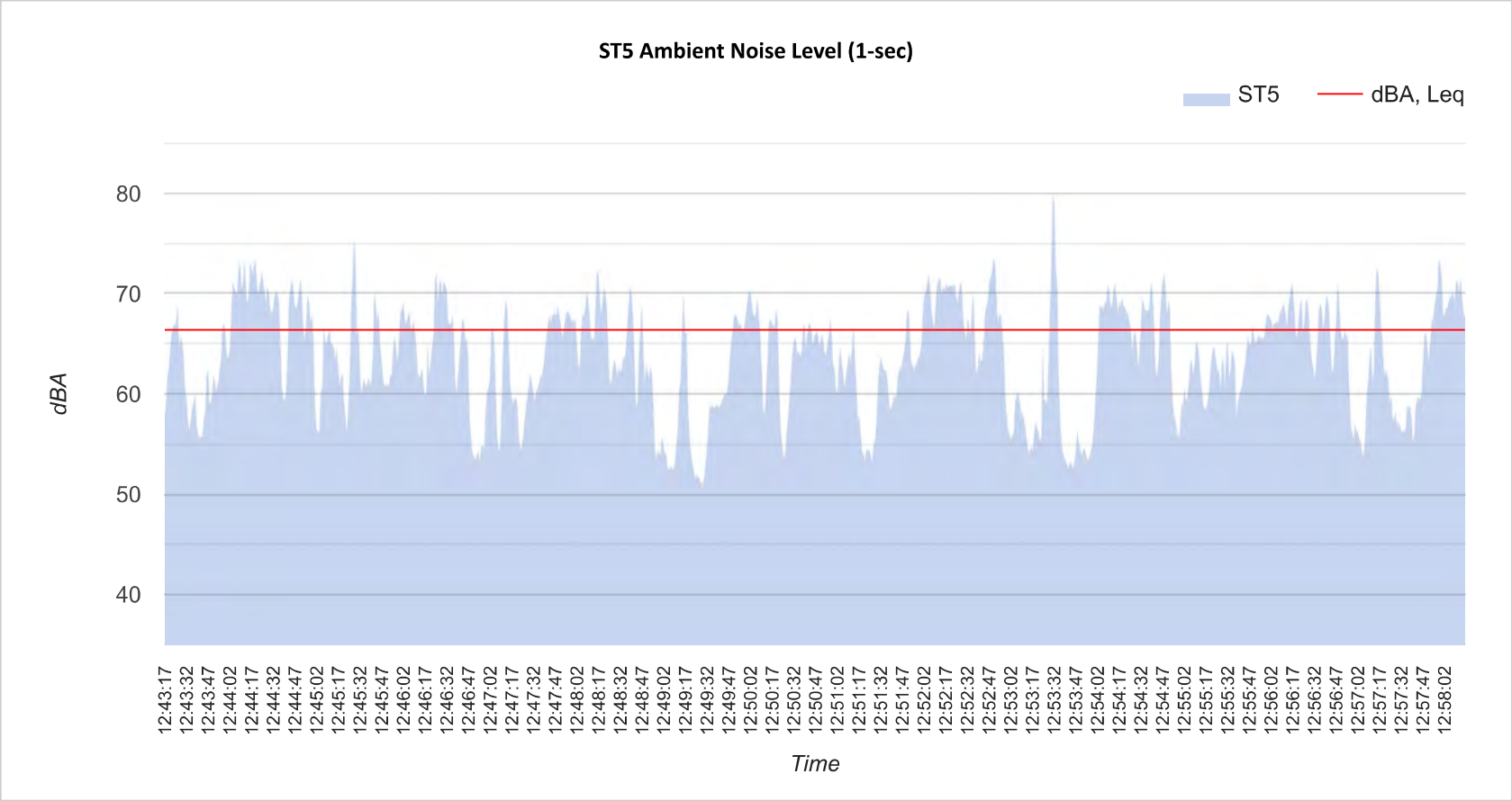
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall site	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	Road and commercial noise
Site Id:	ST4	**Ground Type:**	buildings and asphalt	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

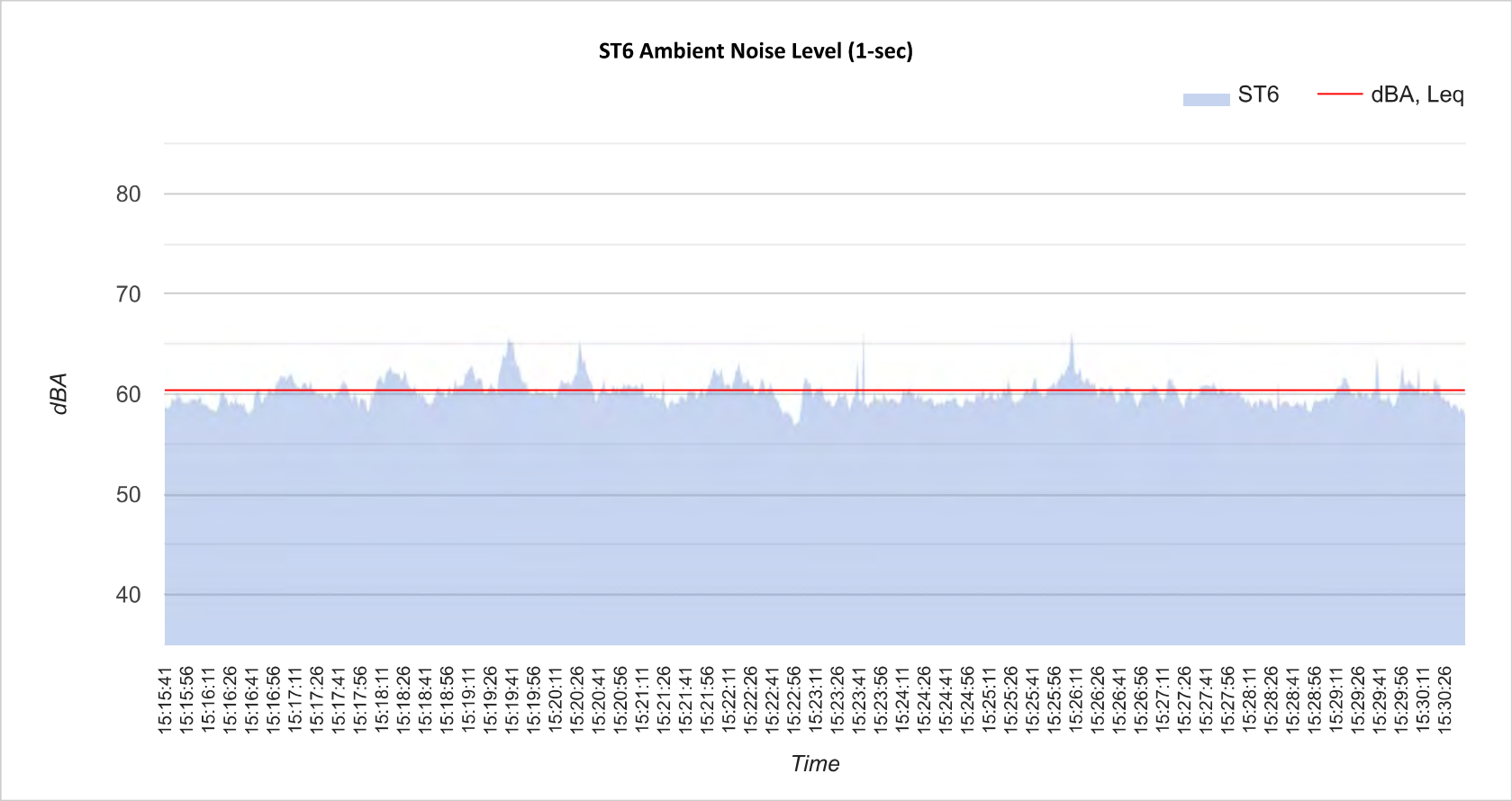
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall site	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	Road and commercial noise
Site Id:	ST5	**Ground Type:**	buildings and asphalt	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

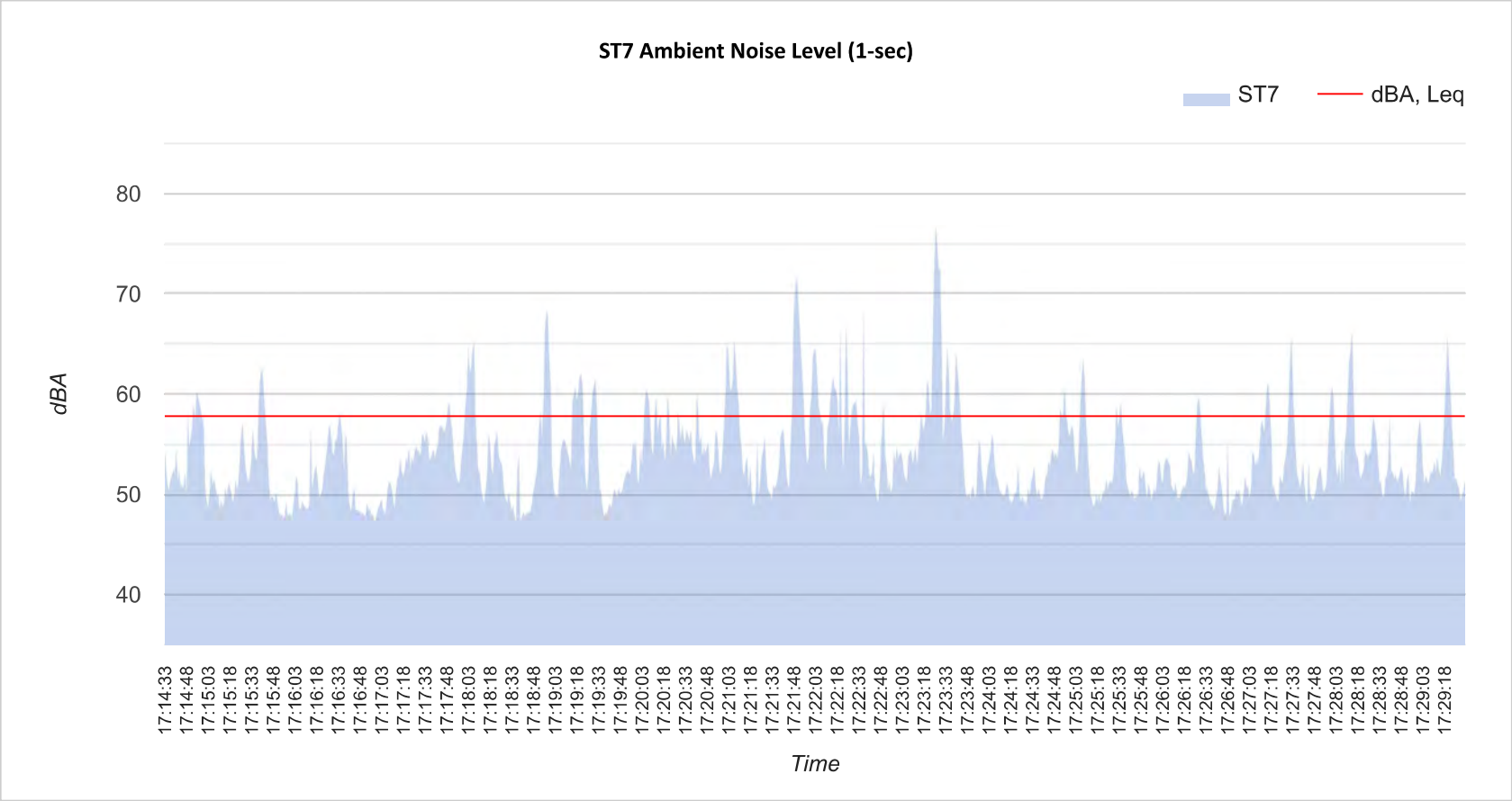
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Near 405 behind sound wall	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	Road noise from 405 even with a 15+ft wall
Site Id:	ST6	**Ground Type:**	Homes Walls and asphalt	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

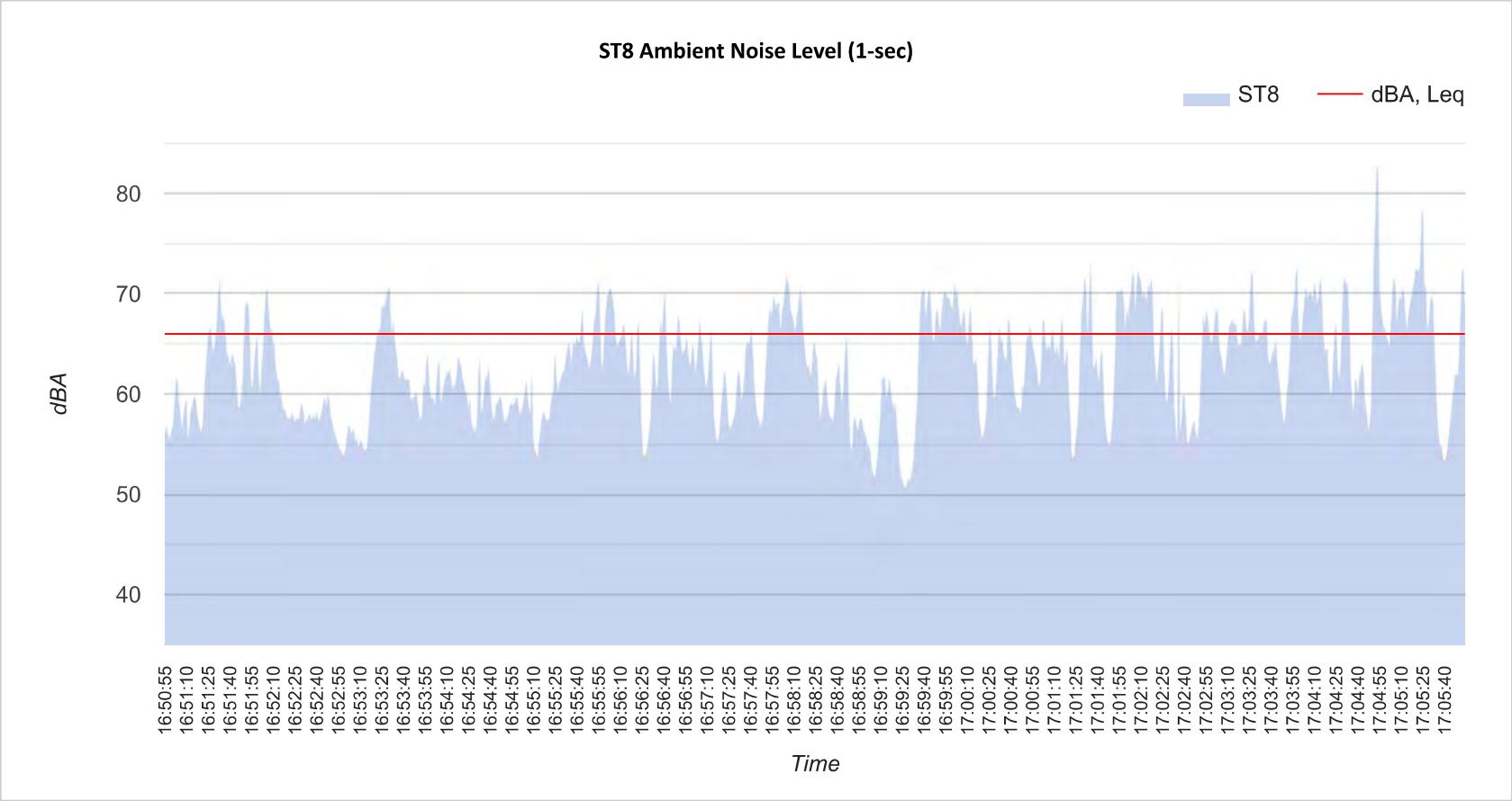
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall site	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	road noise and residential noise
Site Id:	ST7	**Ground Type:**	buildings and asvault	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

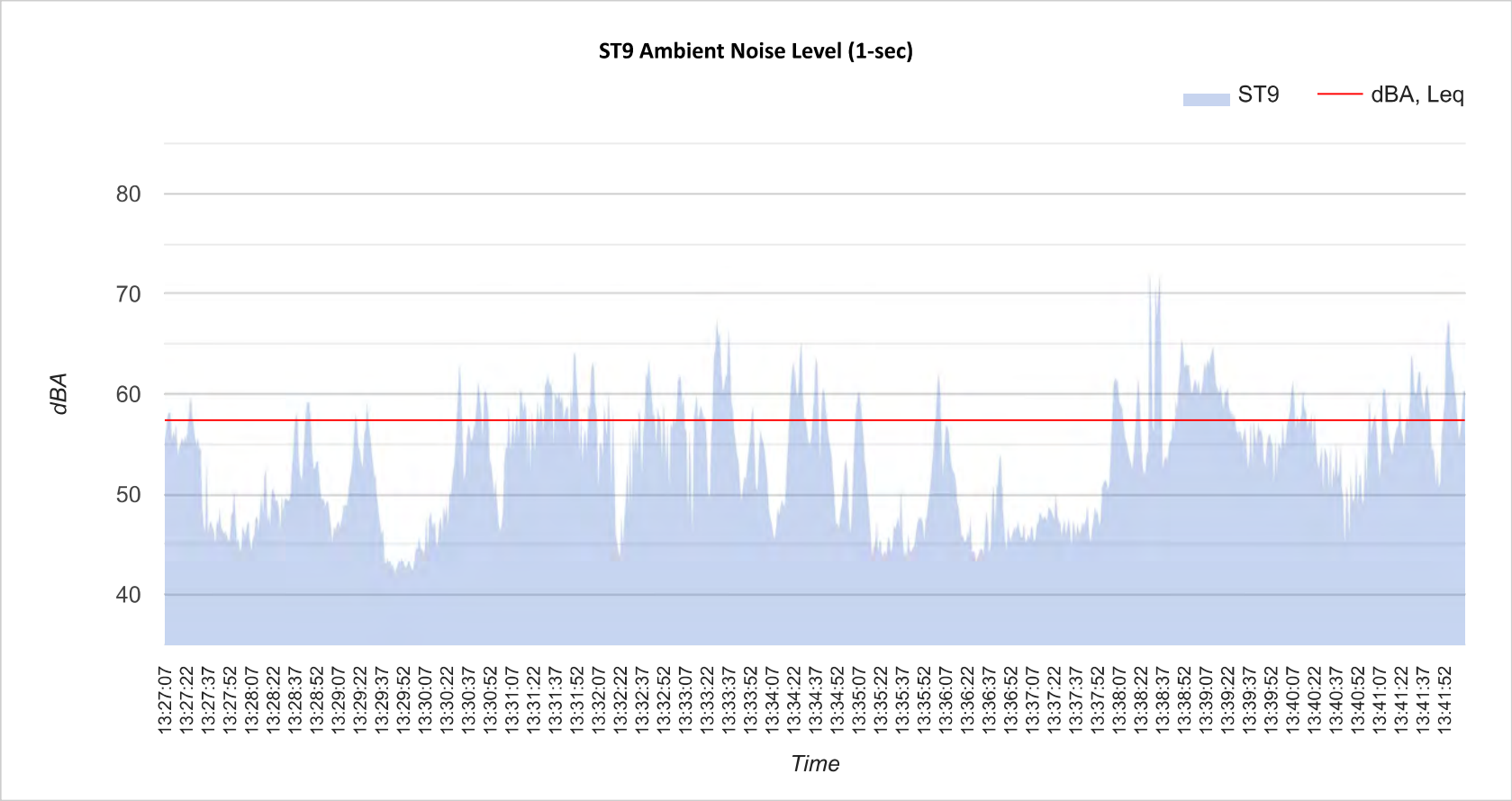
Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Buildings 1-2 stories tall near	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	road noise and residential noise
Site Id:	ST8	**Ground Type:**	buildings and asphalt opening onto park	



MD ACOUSTICS

15-Minute Continuous Noise Measurement Datasheet - Cont.

Project Name:	Lawndale Hawthorne GP & Specific Plan Update	**Site Topo:**	Park surrounded by residential	**Noise Source(s) w/ Distance:**
Site Address/Location:	LawnDale	**Meteorological Cond.:**	64F Winds 0-1MPH	road noise and residential noise
Site Id:	ST9	**Ground Type:**	buildings and asphalt opening onto park	



MD ACOUSTICS

Appendix C:

FHWA Roadway Noise Worksheets

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to 153rd Pl.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	30,382
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,038

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.5	67.6	65.8	59.7	68.3	69.0
MEDIUM TRUCKS	70.4	68.7	65.0	61.2	69.5	69.9
HEAVY TRUCKS	65.3	63.3	60.0	57.6	65.3	65.6
VEHICULAR NOISE	73.7	71.8	69.0	64.5	72.8	**73.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	107	338	1068	3378
LDN	96	304	960	3036

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	169th St. to Redondo Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	40,769
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,077

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.0	66.0	64.2	58.9	67.2	67.8
MEDIUM TRUCKS	69.0	67.3	63.0	60.2	68.4	68.7
HEAVY TRUCKS	64.7	62.4	59.1	58.2	65.4	65.7
VEHICULAR NOISE	72.3	70.4	67.4	64.0	71.9	**72.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	170	538	1703	5384
LDN	156	492	1555	4918

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to 160th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	39,254
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,925

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.8	66.0	64.1	58.0	66.7	67.3
MEDIUM TRUCKS	68.7	67.0	63.4	59.5	67.9	68.3
HEAVY TRUCKS	63.6	61.6	58.4	55.9	63.6	63.9
VEHICULAR NOISE	72.0	70.2	67.4	62.8	71.2	**71.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	145	460	1455	4600
LDN	131	413	1307	4135

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Artesia Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave. to Grevillea Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,333
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,333

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.1	68.2	66.4	60.3	69.0	69.6
MEDIUM TRUCKS	71.0	69.3	65.7	61.8	70.2	70.6
HEAVY TRUCKS	65.9	63.9	60.7	58.2	65.9	66.2
VEHICULAR NOISE	74.3	72.5	69.7	65.1	73.5	**73.9**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	123	390	1234	3901
LDN	111	351	1109	3506

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to Artesia Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	34,669
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,467

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.2	70.3	68.5	62.4	71.1	71.7
MEDIUM TRUCKS	72.4	70.6	67.0	63.2	71.5	71.9
HEAVY TRUCKS	66.9	64.9	61.6	59.2	66.9	67.2
VEHICULAR NOISE	75.9	74.1	71.3	66.7	75.0	**75.5**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	178	562	1777	5619
LDN	159	504	1593	5037

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	I-405 S Entrance to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	46,980
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	50
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,698

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	43.4	- -
MEDIUM TRUCKS=	4.00	43.3	- -
HEAVY TRUCKS =	8.01	43.4	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.0	69.0	67.3	62.0	70.3	70.8
MEDIUM TRUCKS	72.1	70.3	66.1	63.3	71.4	71.7
HEAVY TRUCKS	67.7	65.4	62.2	61.3	68.4	68.7
VEHICULAR NOISE	75.4	73.5	70.4	67.0	75.0	**75.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	172	544	1720	5439
LDN	157	497	1571	4968

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave to Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	23,463
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,346

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.6	68.9	66.4	59.3	68.8	69.4
MEDIUM TRUCKS	70.5	69.0	64.0	60.4	69.3	69.6
HEAVY TRUCKS	62.7	61.0	54.6	54.6	62.4	62.6
VEHICULAR NOISE	73.9	72.3	68.6	63.5	72.5	**73.0**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	99	313	989	3127
LDN	89	282	892	2820

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	36,715
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,672

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.5	65.7	63.8	57.7	66.4	67.0
MEDIUM TRUCKS	68.4	66.7	63.1	59.2	67.6	68.0
HEAVY TRUCKS	63.3	61.3	58.1	55.6	63.3	63.6
VEHICULAR NOISE	71.7	69.9	67.1	62.5	70.9	**71.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	136	430	1361	4303
LDN	122	387	1223	3867

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	162nd St. to 166th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	44,037
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,404

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.3	66.3	64.6	59.3	67.5	68.1
MEDIUM TRUCKS	69.3	67.6	63.3	60.5	68.7	69.0
HEAVY TRUCKS	65.0	62.7	59.5	58.5	65.7	66.0
VEHICULAR NOISE	72.7	70.8	67.7	64.3	72.3	**72.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	184	582	1839	5816
LDN	168	531	1680	5312

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Rosecrans Ave.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	32,747
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,275

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.0	70.1	68.3	62.2	70.8	71.4
MEDIUM TRUCKS	72.1	70.4	66.8	62.9	71.3	71.7
HEAVY TRUCKS	66.6	64.7	61.4	59.0	66.6	66.9
VEHICULAR NOISE	75.6	73.8	71.1	66.4	74.8	**75.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	168	531	1678	5308
LDN	150	476	1505	4758

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Redondo Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	18,912
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	1,891

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.7	65.2	58.1	67.6	68.2
MEDIUM TRUCKS	69.3	67.8	62.8	59.2	68.1	68.4
HEAVY TRUCKS	61.5	59.8	53.4	53.4	61.2	61.4
VEHICULAR NOISE	72.7	71.1	67.4	62.3	71.3	**71.8**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	75	237	749	2369
LDN	68	214	676	2137

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Freeman Ave. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	19,794
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	1,979

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.6	67.9	65.4	58.3	67.8	68.4
MEDIUM TRUCKS	69.5	68.0	63.0	59.4	68.3	68.6
HEAVY TRUCKS	61.7	60.0	53.6	53.6	61.4	61.6
VEHICULAR NOISE	72.9	71.3	67.6	62.5	71.5	**72.0**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	78	248	784	2480
LDN	71	224	707	2236

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Prairie Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	25,223
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,522

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.6	69.0	66.5	59.3	68.9	69.5
MEDIUM TRUCKS	70.6	69.1	64.0	60.5	69.3	69.7
HEAVY TRUCKS	62.8	61.1	54.6	54.6	62.5	62.7
VEHICULAR NOISE	74.0	72.4	68.6	63.6	72.6	**73.0**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	100	316	999	3160
LDN	90	285	901	2850

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Prairie Ave. to Crenshaw Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	21,543
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	55
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,154

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	41.9	- -
MEDIUM TRUCKS=	4.00	41.8	- -
HEAVY TRUCKS =	8.01	41.9	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	66.2	63.7	56.6	66.1	66.7
MEDIUM TRUCKS	68.6	67.1	62.0	58.5	67.3	67.7
HEAVY TRUCKS	61.1	59.5	53.0	53.0	60.9	61.0
VEHICULAR NOISE	71.7	70.1	66.2	61.3	70.3	**70.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	59	187	591	1867
LDN	53	169	535	1690

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Crenshaw Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	27,196
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,720

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.1	67.4	64.9	57.8	67.3	67.9
MEDIUM TRUCKS	69.8	68.3	63.2	59.7	68.5	68.9
HEAVY TRUCKS	62.3	60.7	54.2	54.2	62.1	62.2
VEHICULAR NOISE	72.9	71.3	67.4	62.5	71.5	**71.9**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	78	246	778	2461
LDN	70	223	704	2227

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	West of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	254,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	25,400

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.2	81.3	79.5	74.2	82.5	83.0
MEDIUM TRUCKS	80.7	79.0	74.7	71.9	80.1	80.4
HEAVY TRUCKS	74.7	72.4	69.1	68.2	75.4	75.7
VEHICULAR NOISE	85.5	83.6	81.0	76.9	85.0	**85.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3480	11003	34795	110033
LDN	3136	9915	31355	99155

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	East of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	242,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	24,200

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.0	81.1	79.3	74.0	82.3	82.8
MEDIUM TRUCKS	80.5	78.8	74.5	71.7	79.9	80.2
HEAVY TRUCKS	74.5	72.2	68.9	68.0	75.2	75.5
VEHICULAR NOISE	85.3	83.4	80.8	76.7	84.8	**85.2**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3315	10483	33152	104835
LDN	2987	9447	29874	94470

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to 153rd Pl.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	29,900
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,990

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.4	67.5	65.7	59.6	68.3	68.9
MEDIUM TRUCKS	70.3	68.6	65.0	61.1	69.5	69.9
HEAVY TRUCKS	65.2	63.2	60.0	57.5	65.2	65.5
VEHICULAR NOISE	73.6	71.8	69.0	64.4	72.8	**73.2**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	105	332	1051	3325
LDN	94	299	945	2988

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Artesia Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave. to Grevillea Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,500
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,350

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.1	68.3	66.4	60.3	69.0	69.6
MEDIUM TRUCKS	71.1	69.3	65.7	61.8	70.2	70.6
HEAVY TRUCKS	65.9	63.9	60.7	58.3	65.9	66.2
VEHICULAR NOISE	74.3	72.5	69.7	65.1	73.5	**73.9**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	124	392	1240	3921
LDN	111	352	1114	3524

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave to Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	27,400
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,740

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	69.6	67.1	60.0	69.5	70.1
MEDIUM TRUCKS	71.2	69.7	64.7	61.1	70.0	70.3
HEAVY TRUCKS	63.4	61.7	55.3	55.3	63.1	63.3
VEHICULAR NOISE	74.6	73.0	69.2	64.2	73.2	**73.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	115	365	1155	3652
LDN	104	329	1041	3293

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to Artesia Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,600
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,360

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.1	70.2	68.4	62.3	70.9	71.6
MEDIUM TRUCKS	72.2	70.5	66.9	63.0	71.4	71.8
HEAVY TRUCKS	66.8	64.8	61.5	59.1	66.7	67.1
VEHICULAR NOISE	75.8	73.9	71.2	66.5	74.9	**75.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	172	545	1722	5446
LDN	154	488	1544	4882

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Rosecrans Ave.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	36,400
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,640

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.4	70.6	68.7	62.6	71.3	71.9
MEDIUM TRUCKS	72.6	70.9	67.2	63.4	71.7	72.1
HEAVY TRUCKS	67.1	65.1	61.8	59.4	67.1	67.4
VEHICULAR NOISE	76.1	74.3	71.6	66.9	75.2	**75.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	187	590	1866	5900
LDN	167	529	1673	5289

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	34,600
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,460

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.3	65.4	63.6	57.5	66.1	66.7
MEDIUM TRUCKS	68.2	66.4	62.8	59.0	67.3	67.7
HEAVY TRUCKS	63.1	61.1	57.8	55.4	63.0	63.4
VEHICULAR NOISE	71.5	69.6	66.8	62.3	70.6	**71.1**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	128	405	1282	4055
LDN	115	364	1152	3644

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to 160th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	39,000
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,900

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.8	65.9	64.1	58.0	66.7	67.3
MEDIUM TRUCKS	68.7	67.0	63.3	59.5	67.8	68.2
HEAVY TRUCKS	63.6	61.6	58.3	55.9	63.6	63.9
VEHICULAR NOISE	72.0	70.1	67.3	62.8	71.1	**71.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	145	457	1445	4571
LDN	130	411	1299	4108

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	162nd St. to 166th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	43,200
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,320

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.2	66.2	64.5	59.2	67.5	68.0
MEDIUM TRUCKS	69.2	67.5	63.3	60.5	68.6	68.9
HEAVY TRUCKS	64.9	62.6	59.4	58.5	65.6	65.9
VEHICULAR NOISE	72.6	70.7	67.6	64.2	72.2	**72.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	180	571	1804	5706
LDN	165	521	1648	5211

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	169th St. to Redondo Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	40,200
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,020

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	65.9	64.2	58.9	67.1	67.7
MEDIUM TRUCKS	68.9	67.2	62.9	60.1	68.3	68.6
HEAVY TRUCKS	64.6	62.3	59.1	58.2	65.3	65.6
VEHICULAR NOISE	72.3	70.4	67.3	63.9	71.9	**72.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	168	531	1679	5309
LDN	153	485	1533	4849

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	I-405 S Entrance to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	47,100
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	50
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,710

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	43.4	- -
MEDIUM TRUCKS=	4.00	43.3	- -
HEAVY TRUCKS =	8.01	43.4	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.0	69.1	67.3	62.0	70.3	70.8
MEDIUM TRUCKS	72.1	70.3	66.1	63.3	71.4	71.8
HEAVY TRUCKS	67.7	65.5	62.2	61.3	68.4	68.7
VEHICULAR NOISE	75.4	73.5	70.4	67.0	75.0	**75.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	172	545	1724	5453
LDN	157	498	1575	4980

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Redondo Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,300
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,230

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.1	68.4	65.9	58.8	68.3	69.0
MEDIUM TRUCKS	70.1	68.5	63.5	60.0	68.8	69.1
HEAVY TRUCKS	62.2	60.6	54.1	54.1	61.9	62.1
VEHICULAR NOISE	73.4	71.8	68.1	63.0	72.0	**72.5**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	88	279	883	2794
LDN	80	252	797	2519

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	East of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	241,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	24,100

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.0	81.0	79.3	74.0	82.3	82.8
MEDIUM TRUCKS	80.5	78.8	74.5	71.7	79.9	80.2
HEAVY TRUCKS	74.4	72.2	68.9	68.0	75.2	75.4
VEHICULAR NOISE	85.3	83.4	80.8	76.6	84.7	**85.2**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3301	10440	33015	104401
LDN	2975	9408	29751	94080

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Freeman Ave. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	23,800
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,380

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.4	68.7	66.2	59.1	68.6	69.2
MEDIUM TRUCKS	70.3	68.8	63.8	60.2	69.1	69.4
HEAVY TRUCKS	62.5	60.8	54.4	54.4	62.2	62.4
VEHICULAR NOISE	73.7	72.1	68.4	63.3	72.3	**72.8**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	94	298	943	2981
LDN	85	269	850	2689

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Prairie Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	28,300
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,830

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.1	69.5	67.0	59.8	69.4	70.0
MEDIUM TRUCKS	71.1	69.6	64.5	61.0	69.8	70.2
HEAVY TRUCKS	63.3	61.6	55.1	55.1	63.0	63.2
VEHICULAR NOISE	74.5	72.9	69.1	64.1	73.1	**73.5**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	112	355	1121	3545
LDN	101	320	1011	3197

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Prairie Ave. to Crenshaw Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO: Existing	

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	23,600
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	55
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,360

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	41.9	- -
MEDIUM TRUCKS=	4.00	41.8	- -
HEAVY TRUCKS =	8.01	41.9	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.3	66.6	64.1	57.0	66.5	67.1
MEDIUM TRUCKS	69.0	67.5	62.4	58.9	67.7	68.1
HEAVY TRUCKS	61.5	59.9	53.4	53.4	61.2	61.4
VEHICULAR NOISE	72.0	70.5	66.6	61.7	70.7	**71.1**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	65	205	647	2046
LDN	59	185	586	1852

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Crenshaw Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Existing		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	32,900
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,290

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.9	68.2	65.7	58.6	68.1	68.8
MEDIUM TRUCKS	70.6	69.1	64.1	60.5	69.3	69.7
HEAVY TRUCKS	63.2	61.5	55.0	55.0	62.9	63.1
VEHICULAR NOISE	73.7	72.1	68.2	63.4	72.3	**72.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	94	298	941	2977
LDN	85	269	852	2694

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	West of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Existing

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	253,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	25,300

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.2	81.3	79.5	74.2	82.5	83.0
MEDIUM TRUCKS	80.7	79.0	74.7	71.9	80.1	80.4
HEAVY TRUCKS	74.6	72.4	69.1	68.2	75.4	75.6
VEHICULAR NOISE	85.5	83.6	81.0	76.9	84.9	**85.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3466	10960	34658	109600
LDN	3123	9876	31232	98764

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to 153rd Pl.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	30,400
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,040

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.5	67.6	65.8	59.7	68.4	69.0
MEDIUM TRUCKS	70.4	68.7	65.0	61.2	69.5	69.9
HEAVY TRUCKS	65.3	63.3	60.0	57.6	65.3	65.6
VEHICULAR NOISE	73.7	71.8	69.0	64.5	72.8	**73.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	107	338	1069	3380
LDN	96	304	961	3038

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave to Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	27,500
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,750

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.3	69.6	67.1	60.0	69.5	70.1
MEDIUM TRUCKS	71.2	69.7	64.7	61.1	70.0	70.3
HEAVY TRUCKS	63.4	61.7	55.3	55.3	63.1	63.3
VEHICULAR NOISE	74.6	73.0	69.3	64.2	73.2	**73.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	116	366	1159	3665
LDN	105	331	1045	3305

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	I-405 S Entrance to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Future Plus Project		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	47,200
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	50
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,720

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	43.4	- -
MEDIUM TRUCKS=	4.00	43.3	- -
HEAVY TRUCKS =	8.01	43.4	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.0	69.1	67.3	62.0	70.3	70.8
MEDIUM TRUCKS	72.1	70.3	66.1	63.3	71.4	71.8
HEAVY TRUCKS	67.7	65.5	62.2	61.3	68.5	68.7
VEHICULAR NOISE	75.4	73.5	70.4	67.0	75.0	**75.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	173	546	1728	5465
LDN	158	499	1578	4991

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	162nd St. to 166th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	44,900
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,490

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.4	66.4	64.7	59.3	67.6	68.2
MEDIUM TRUCKS	69.4	67.7	63.4	60.6	68.8	69.1
HEAVY TRUCKS	65.1	62.8	59.5	58.6	65.8	66.1
VEHICULAR NOISE	72.8	70.8	67.8	64.4	72.3	**72.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	188	593	1875	5930
LDN	171	542	1713	5416

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Future Plus Project		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	35,900
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,590

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.4	65.6	63.7	57.6	66.3	66.9
MEDIUM TRUCKS	68.3	66.6	63.0	59.1	67.5	67.9
HEAVY TRUCKS	63.2	61.2	58.0	55.6	63.2	63.5
VEHICULAR NOISE	71.6	69.8	67.0	62.4	70.8	**71.2**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	133	421	1330	4207
LDN	120	378	1196	3781

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Artesia Blvd.	DATE:	27-Jun-23
SEGMENT	Inglewood Ave. to Grevillea Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,500
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,350

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.1	68.3	66.4	60.3	69.0	69.6
MEDIUM TRUCKS	71.1	69.3	65.7	61.8	70.2	70.6
HEAVY TRUCKS	65.9	63.9	60.7	58.3	65.9	66.2
VEHICULAR NOISE	74.3	72.5	69.7	65.1	73.5	**73.9**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	124	392	1240	3921
LDN	111	352	1114	3524

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to 160th St.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	40,300
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,030

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	66.1	64.2	58.1	66.8	67.4
MEDIUM TRUCKS	68.8	67.1	63.5	59.6	68.0	68.4
HEAVY TRUCKS	63.7	61.8	58.5	56.1	63.7	64.0
VEHICULAR NOISE	72.1	70.3	67.5	62.9	71.3	**71.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	149	472	1494	4723
LDN	134	424	1342	4245

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Hawthorne Blvd.	DATE:	27-Jun-23
SEGMENT	169th St. to Redondo Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	40,300
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	130
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	4,030

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	76.1	- -
MEDIUM TRUCKS=	4.00	76.0	- -
HEAVY TRUCKS =	8.01	76.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	67.9	65.9	64.2	58.9	67.2	67.7
MEDIUM TRUCKS	68.9	67.2	62.9	60.2	68.3	68.6
HEAVY TRUCKS	64.6	62.3	59.1	58.2	65.3	65.6
VEHICULAR NOISE	72.3	70.4	67.3	63.9	71.9	**72.3**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	168	532	1683	5323
LDN	154	486	1537	4861

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Inglewood Ave.	DATE:	27-Jun-23
SEGMENT	Manhattan Beach Blvd. to Artesia Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Future Plus Project		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,800
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,380

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.1	70.2	68.4	62.3	71.0	71.6
MEDIUM TRUCKS	72.3	70.5	66.9	63.0	71.4	71.8
HEAVY TRUCKS	66.8	64.8	61.5	59.1	66.7	67.1
VEHICULAR NOISE	75.8	74.0	71.2	66.6	74.9	**75.4**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	173	548	1732	5479
LDN	155	491	1553	4911

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Redondo Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	22,300
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,230

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.1	68.4	65.9	58.8	68.3	69.0
MEDIUM TRUCKS	70.1	68.5	63.5	60.0	68.8	69.1
HEAVY TRUCKS	62.2	60.6	54.1	54.1	61.9	62.1
VEHICULAR NOISE	73.4	71.8	68.1	63.0	72.0	**72.5**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	88	279	883	2794
LDN	80	252	797	2519

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Rosecrans Ave.	DATE:	27-Jun-23
SEGMENT	Hawthorne Blvd. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	36,300
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	70
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,630

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.778	0.128	0.094	0.875
MEDIUM TRUCKS	0.805	0.087	0.108	0.115
HEAVY TRUCKS	0.758	0.089	0.153	0.011

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	35.8	- -
MEDIUM TRUCKS=	4.00	35.7	- -
HEAVY TRUCKS =	8.01	35.8	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	72.4	70.5	68.7	62.6	71.3	71.9
MEDIUM TRUCKS	72.6	70.8	67.2	63.4	71.7	72.1
HEAVY TRUCKS	67.1	65.1	61.8	59.4	67.1	67.4
VEHICULAR NOISE	76.1	74.3	71.5	66.9	75.2	**75.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	186	588	1861	5884
LDN	167	527	1668	5274

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Freeman Ave. to Prairie Ave.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	24,100
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,410

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	70.4	68.8	66.3	59.1	68.7	69.3
MEDIUM TRUCKS	70.4	68.9	63.8	60.3	69.1	69.5
HEAVY TRUCKS	62.6	60.9	54.4	54.4	62.3	62.5
VEHICULAR NOISE	73.8	72.2	68.4	63.4	72.4	**72.8**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	95	302	955	3019
LDN	86	272	861	2723

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Prairie Ave.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	28,900
SPEED =	40
PK HR % =	10
NEAR LANE/FAR LANE DIST =	65
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,890

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	38.1	- -
MEDIUM TRUCKS=	4.00	38.0	- -
HEAVY TRUCKS =	8.01	38.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	71.2	69.5	67.1	59.9	69.5	70.1
MEDIUM TRUCKS	71.2	69.7	64.6	61.1	69.9	70.2
HEAVY TRUCKS	63.4	61.7	55.2	55.2	63.1	63.3
VEHICULAR NOISE	74.5	73.0	69.2	64.1	73.1	**73.6**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	114	362	1145	3620
LDN	103	326	1032	3265

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Manhattan Beach Blvd.	DATE:	27-Jun-23
SEGMENT	Prairie Ave. to Crenshaw Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	24,000
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	55
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	2,400

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	41.9	- -
MEDIUM TRUCKS=	4.00	41.8	- -
HEAVY TRUCKS =	8.01	41.9	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	68.3	66.7	64.2	57.0	66.6	67.2
MEDIUM TRUCKS	69.1	67.5	62.5	59.0	67.8	68.1
HEAVY TRUCKS	61.6	59.9	53.5	53.5	61.3	61.5
VEHICULAR NOISE	72.1	70.5	66.6	61.8	70.8	**71.2**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	66	208	658	2080
LDN	60	188	595	1883

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	Crenshaw Blvd.	DATE:	27-Jun-23
SEGMENT	Marine Ave. to Manhattan Beach Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA SCENARIO: Future Plus Project		

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	33,200
SPEED =	35
PK HR % =	10
NEAR LANE/FAR LANE DIST =	60
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	3,320

RECEIVER INPUT DATA

RECEIVER DISTANCE =		50
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		50
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.818	0.115	0.067	0.883
MEDIUM TRUCKS	0.846	0.066	0.088	0.111
HEAVY TRUCKS	0.815	0.046	0.138	0.006

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	40.1	- -
MEDIUM TRUCKS=	4.00	40.0	- -
HEAVY TRUCKS =	8.01	40.1	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	69.9	68.3	65.8	58.6	68.2	68.8
MEDIUM TRUCKS	70.7	69.1	64.1	60.6	69.4	69.7
HEAVY TRUCKS	63.2	61.5	55.1	55.1	62.9	63.1
VEHICULAR NOISE	73.7	72.1	68.2	63.4	72.4	**72.8**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	95	300	950	3004
LDN	86	272	860	2719

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	West of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	271,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	27,100

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.5	81.5	79.8	74.5	82.8	83.3
MEDIUM TRUCKS	81.0	79.3	75.0	72.2	80.4	80.7
HEAVY TRUCKS	74.9	72.7	69.4	68.5	75.7	75.9
VEHICULAR NOISE	85.8	83.9	81.3	77.1	85.2	**85.7**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3712	11740	37124	117397
LDN	3345	10579	33454	105791

FHWA-RD-77-108 ROADWAY TRAFFIC NOISE PREDICTION MODEL (CNEL) - CALVENO

PROJECT:	Lawndale General Plan Update	JOB #:	0462-19-10
ROADWAY	San Diego Freeway	DATE:	27-Jun-23
SEGMENT	East of Hawthorne Blvd.	ENGINEER:	C. Pincock
LOCATION:	City of Lawndale, CA	SCENARIO:	Future Plus Project

NOISE INPUT DATA

ROADWAY CONDITIONS

ADT =	259,000
SPEED =	65
PK HR % =	10
NEAR LANE/FAR LANE DIST =	110
ROAD ELEVATION =	0
GRADE =	0
PK HR VOL =	25,900

RECEIVER INPUT DATA

RECEIVER DISTANCE =		100
DIST C/L TO WALL =		0
RECEIVER HEIGHT =		5
WALL DISTANCE FROM RECEIVER =		100
PAD ELEVATION =		0
ROADWAY VIEW:	LF ANGLE	-90
	RT ANGLE	90
	DF ANGLE	180

SITE CONDITIONS

AUTOMOBILES	10	
MED TRUCKS	10	(HARD SITE=10, SOFT SITE=15)
HVY TRUCKS	10	

WALL INFORMATION

HTH WALL =	0	FT
AMBIENT =	0	
BARRIER =	0	(0=WALL,1=BERM)

VEHICLE MIX DATA

VEHICLE TYPE	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.761	0.127	0.112	0.869
MEDIUM TRUCKS	0.806	0.075	0.119	0.117
HEAVY TRUCKS	0.712	0.084	0.204	0.013

MISC. VEHICLE INFO

VEHICLE TYPE	HEIGHT	SLE DISTANCE	GRADE ADJUSTMENT
AUTOMOBILES =	2.00	83.6	- -
MEDIUM TRUCKS=	4.00	83.5	- -
HEAVY TRUCKS =	8.01	83.6	0.0

NOISE OUTPUT DATA

NOISE IMPACTS (WITHOUT TOPO OR BARRIER SHIELDING)

VEHICLE TYPE	PK HR LEQ	DAY LEQ	EVEN LEQ	NIGHT LEQ	LDN	CNEL
AUTOMOBILES	83.3	81.4	79.6	74.3	82.6	83.1
MEDIUM TRUCKS	80.8	79.1	74.8	72.0	80.2	80.5
HEAVY TRUCKS	74.8	72.5	69.2	68.3	75.5	75.7
VEHICULAR NOISE	85.6	83.7	81.1	77.0	85.0	**85.5**

NOISE CONTOUR (FT)				
NOISE LEVELS	**70 dBA**	**65 dBA**	**60 dBA**	**55 dBA**
CNEL	3548	11220	35480	112199
LDN	3197	10111	31973	101107

Appendix F: Transportation Impact Analysis

KITTELSON & ASSOCIATES

LAWNDALE GENERAL PLAN CEQA TRANSPORTATION ANALYSIS

LAWNDALE, CA

July 12, 2023

Inside front cover

Page Intentionally blank

Lawndale General Plan CEQA Transportation Analysis

Lawndale, CA

Prepared for:
City of Lawndale
14717 Burin Avenue
Lawndale, CA 90260

Prepared by:
Kittelson & Associates, Inc.
750 The City Drive, Suite 410
Orange, CA 92868
714.468.1997

Project Principal:
Tim Erney, AICP, PTP
Senior Principal Planner

Project Manager:
Fernando Sotelo, TE
Associate Engineer

Project Number 24360

July 12, 2023

Page Intentionally blank

CONTENTS

Executive Summary 2
Purpose of Transportation Study 5
Project Characteristics 5
Development Potential 5
Circulation And Parking 6
Regulatory Framework 14
State Regulations 14
Regional Regulations 16
Local Regulations 17
Existing Circulation System 23
Roadway Network 23
Bicycle and Pedestrian Facilities 24
Transit Services 26
CEQA Significance Thresholds 28
Transportation Significance Criteria 28
Specific Transportation Thresholds 28
CEQA Analysis Methodology 31
Travel Demand Model 31
Impact Analysis 34
Roadway Volumes Forecast 38

LIST OF FIGURES

Figure 1: General Plan Update Land Use Map 8
Figure 2: General Plan Update Land-Use Change Map 9
Figure 3: Roadway Functional Classifications Map 10
Figure 4: Existing and Proposed Bicycle and Pedestrian Networks Map 11
Figure 5: Local Street Network Map 12
Figure 6: Proposed Greenline Extension Project Map 13
Figure 7: Hawthorne Boulevard Specific Plan Map 22

LIST OF TABLES

Table 1: Summary of VMT Impacts....3
Table 2 General Plan Update Buildout by Land Use Designation Summary....7
Table 3 General Plan Update Growth Totals....7
Table 4 LA Metro Bus Service in Lawndale....27
Table 5: Existing General Plan Non-Residential Land Use Assumptions....32
Table 6: Proposed General Plan Non-Residential Land Use Assumptions....32
Table 7: SCAG Model Land Use Inputs for Lawndale Planning Area TAZs[1]....33
Table 8: VMT Generated by Land Uses within the Project Area and Region....36
Table 9: Existing and Future Roadway Segment Daily Traffic Volumes....39

APPENDICES

Appendix A: Detailed VMT Impact Summary

Page intentionally blank.

EXECUTIVE SUMMARY

The City of Lawndale is updating its General Plan, which will guide the City's development, growth, and conservation through land use objectives and policy guidance. While no specific development projects are proposed as part of the Lawndale General Plan Update , the General Plan Update will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The buildout analysis assumes a 20-year planning horizon, with 2045 being the full buildout year of the General Plan Update. The study area is comprised of city boundaries and the city's sphere of influence. The Hawthorne Boulevard Specific Plan (HBSP) is also being updated and incorporated in this analysis. The proposed general plan is referred to in this study as "General Plan Update" or "Project", and the project area is referenced as "General Plan Planning Area" or "the Planning Area". The adopted General Plan is referred in this study as "Existing General Plan". This transportation impact study was prepared to provide an evaluation of the potential transportation impacts from the Project.

VMT IMPACT ASSESSMENT

Per current CEQA requirements, Vehicle-Miles Traveled (VMT) is the most appropriate metric to evaluate a project's transportation impact. Since the City has not officially adopted VMT thresholds and guidelines for the preparation of transportation studies, this analysis relies on guidance from the California Governor's Office of Planning and Research (OPR) technical advisory to evaluate CEQA guidelines for VMT. The following VMT thresholds apply as project impacts:

- The general plan's residential generated VMT under future conditions would be compared to 15% below the baseline (existing) region-wide VMT/capita average to determine impact significance.
- The general plan's office generated VMT under future conditions would be compared to 15% below the baseline(existing) region-wide VMT/employee average to determine impact significance.

A significant cumulative VMT impact would occur if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS). The 2020 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving a 19 percent reduction by 2035 compared to the 2005 level.

The following scenarios were reviewed and/or developed to analyze potential VMT impacts with the Project:

- 2023 Existing Conditions: corresponds to the existing circulation network and 2023 land use profile.
- 2045 No Project: corresponds to the future year 2045 conditions under currently adopted plan. It consists of the Existing General Plan network and land use adopted in 1992.
- 2045 Project: corresponds to the future year 2045 conditions with maximum development potential with the General Plan Update that is being proposed.

Project VMT Impact Assessment

The projected VMT impacts due to the Project were calculated using the Southern California Association of Governments (SCAG) regional travel model, the results of which are shown in Table 1.

Table 1: Summary of VMT Impacts

Units	2023 Existing Conditions	2045 No Project	2045 Project
Capita			
VMT Per Capita	9.87	8.87	9.19
Impact Threshold[1]	N/A	N/A	10.89
EXCEEDS THRESHOLD	**N/A**	**N/A**	**NO**
Employee			
VMT Per Employee	16.26	15.05	14.78
Impact Threshold[1]	N/A	N/A	**15.41**
EXCEEDS THRESHOLD	**N/A**	**N/A**	**NO**
Total Regional VMT			
Los Angeles County	339,797,977	358,489,475	358,820,209

Source: Kittelson and Associates, 2023.
[1] Impact threshold is 15% below Los Angeles County 2023 base year value
2 Refer to Appendix A for detailed VMT summary showing results for the SCAG region, Los Angeles County and Lawndale.
N/A = not applicable.

Future conditions with the Project would result in decreased VMT per employee and VMT per capita in comparison to 2023 existing conditions. Comparing the Project to 2045 No Project conditions , there would be an increase in VMT per capita and a decrease in VMT per employee; however, the impact threshold would not be exceeded for the Project. Therefore, with respect to consistency with CEQA Guidelines Section 15064.3, subdivision (b), the impact of the Project would be less than significant.

Cumulative VMT Impact Assessment

As noted above, the project impacts in VMT would be less than significant, as the Project's VMT per capita and VMT per employee would not exceed applicable thresholds. The project would also be consistent with the RTP/SCS as it's increasing the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area. Therefore, cumulative impacts would be less than significant and no mitigation would be required.

POTENTIAL CONFLICT WITH A PROGRAM, PLAN, ORDINANCE, OR POLICY ADDRESSING THE CIRCULATION SYSTEM

Relevant City circulation system policies, programs, and plans were reviewed to confirm consistency and that the Project would not preclude implementation of existing plans. Overall, it was determined the Project would not conflict with any approved transportation plans and programs. Moreover, it was determined that there would be a less than significant impact to emergency vehicle access.

POTENTIAL INCREASE IN HAZARDS

The Project does not propose any specific development projects. The Project will accommodate future growth in the City, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area.

Prior to implementation, any improvements would be subject to a detailed review and future consideration by the City's Public Works engineering staff and other relevant City agencies. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be needed at the project design level. Roadway improvements would have to be made in accordance with the City's circulation plan and

roadway design guidelines and meet design guidelines in the California Manual of Uniform Traffic Control Devices and the Caltrans Roadway Design Manual.

Overall, implementation of the Proposed General Plan would not result in hazardous conditions. As individual projects and circulation improvements would undergo review by Public Works and Planning departments for approval and construction and would have to meet design guidelines, no significant impacts would occur.

PURPOSE OF TRANSPORTATION STUDY

The purpose of this transportation study is to assess potentially significant impacts resulting from the implementation of the City of Lawndale General Plan Update project (Project) on the transportation system, and to identify measures to mitigate those impacts. The study also serves as the basis for the transportation component of the Plan's Environmental Impact Report (EIR). This study includes a review of the following:

- Assessment of the existing circulation conditions, including roadways, pedestrian, bicycle, and transit facilities.
- Review of consistency with existing City programs, plans, ordinances, and policies related to pedestrian and bicyclists, and transit facilities.
- Assessment of the Project's Vehicle Miles Traveled (VMT) impact compared to the City's adopted thresholds.
- Assessment of impacts and mitigations related to geometric design and emergency access.

PROJECT CHARACTERISTICS

The City of Lawndale is preparing a comprehensive update to its General Plan, which will guide the City's development, growth, and conservation through land use objectives and policy guidance. The general plan update is referred to in this study as "General Plan Update" or "Project" The City will implement the project by requiring development, infrastructure improvements, and other projects to be consistent with its policies, and by implementing the actions included in the General Plan Update.

Figure 1 presents the General Plan Planning Area (Planning Area) and the proposed General Plan Land Use Map. The Planning Area includes the current city limits as well as an extended Sphere of Influence area.

While no specific development projects are proposed as part of the Project, it will accommodate future growth in Lawndale, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The transportation analysis is based on a 20-year planning horizon, and 2045 is assumed to be the full buildout year of the General Plan (the point at which all parcels in the City are developed according to their General Plan land use designation).

The Hawthorne Boulevard Specific Plan (HBSP) oversees the development of the Hawthorne Boulevard corridor and the north side of both Artesia Boulevard and Redondo Beach Boulevard. The Specific Plan was originally adopted in June 1999 and has undergone various amendments since its adoption. The Specific Plan includes General Commercial, Downtown Commercial, Public Facilities and Multi-Family Medium land use designations. Hawthorne Boulevard serves as the City's primary transportation route, corridor of economic activity, and the community focal point. The HBSP acts as a tool for implementing the goals and policies of the General Plan through the regulation of use, density, height, and other design standards to achieve the overall vision for the area. The HBSP is incorporated into this analysis.

DEVELOPMENT POTENTIAL

Table 2 provides a summary of the buildout potential associated with the General Plan Update Land Use Map compared to existing on-the-ground conditions by land use designation. As shown in Table 2, buildout of the General Plan could yield a total of up to 15,405 housing units, a population of 47,430 people, approximately 5.35 million square feet of non-residential building square footage, and 9,208 jobs within the Planning Area. Figure 2 shows the land use change map. As shown in Table 3, this represents increases over existing conditions of up to approximately 3,942 new housing units, 9,482 people, 808,000 square feet of new non-residential building square footage, and 2,738 jobs.

The Hawthorne Boulevard Specific Plan (HBSP) would account for 90 percent of the proposed growth in residential units within the planning area, 38 percent of the growth in non-residential square footage, and 56 percent of the growth in jobs.

CIRCULATION AND PARKING

The General Plan Mobility Element correlates closely with the Land Use Element and identifies the general locations and extent of existing and proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multi-modal transportation system. This Element is intended to facilitate the movement of people and goods throughout Lawndale by a variety of transportation modes, including vehicles, bicycles, pedestrians, and transit.

ROADWAYS

The proposed General Plan Mobility Element includes a map of proposed vehicular roadway classifications, as shown in Figure 3. The proposed General Plan Mobility Element also includes existing and proposed bicycle networks, as shown in Figure 4. The bicycle facilities have been proposed through several documents and plans, including the South Bay Bicycle Master Plan, the Los Angeles County Bicycle Master Plan (2012), and the LA Metro Bicycle Transportation Strategic Plan (2006) and are incorporated in the proposed Mobility Plan. Figure 5 shows the map of the Local Travel Network to promote micro-mobility modes through the City of Lawndale. The Project is not proposing roadway expansions such as adding through lanes to existing roads.

The Los Angeles Metropolitan Transportation Authority (Metro) has plans to connect more of the South Bay by extending the C rail transit line (Green) from Redondo Beach Station to the new Torrance Transit Center (see Figure 6). Metro prepared a Draft Environmental Impact Report (DEIR) for public review from January 26 to March 27, 2023. The DEIR evaluated three alignments: Metro ROW Elevated/At-Grade Alignment, Trench Option, and Hawthorne Option. Both the Metro ROW and Trench Option would utilize a Metro-owned railroad corridor generally located parallel to Condon Avenue though the western portion of the city, whereas the Hawthorne Option would operate in an elevated alignment located within the median of Hawthorne Boulevard. Metro is anticipated to make a recommendation on its preferred alignment in Summer 2023 based on findings from the DEIR, public comments made during the comment period, technical analysis, stakeholder input, and other factors such as cost, ridership, and project objectives. While three alignments are being considered, this transportation analysis assumes the at-grade alignment within the Metro ROW, consistent with assumptions used by SCAG for the Regional Transportation Plan.

Table 2 General Plan Update Buildout by Land Use Designation Summary

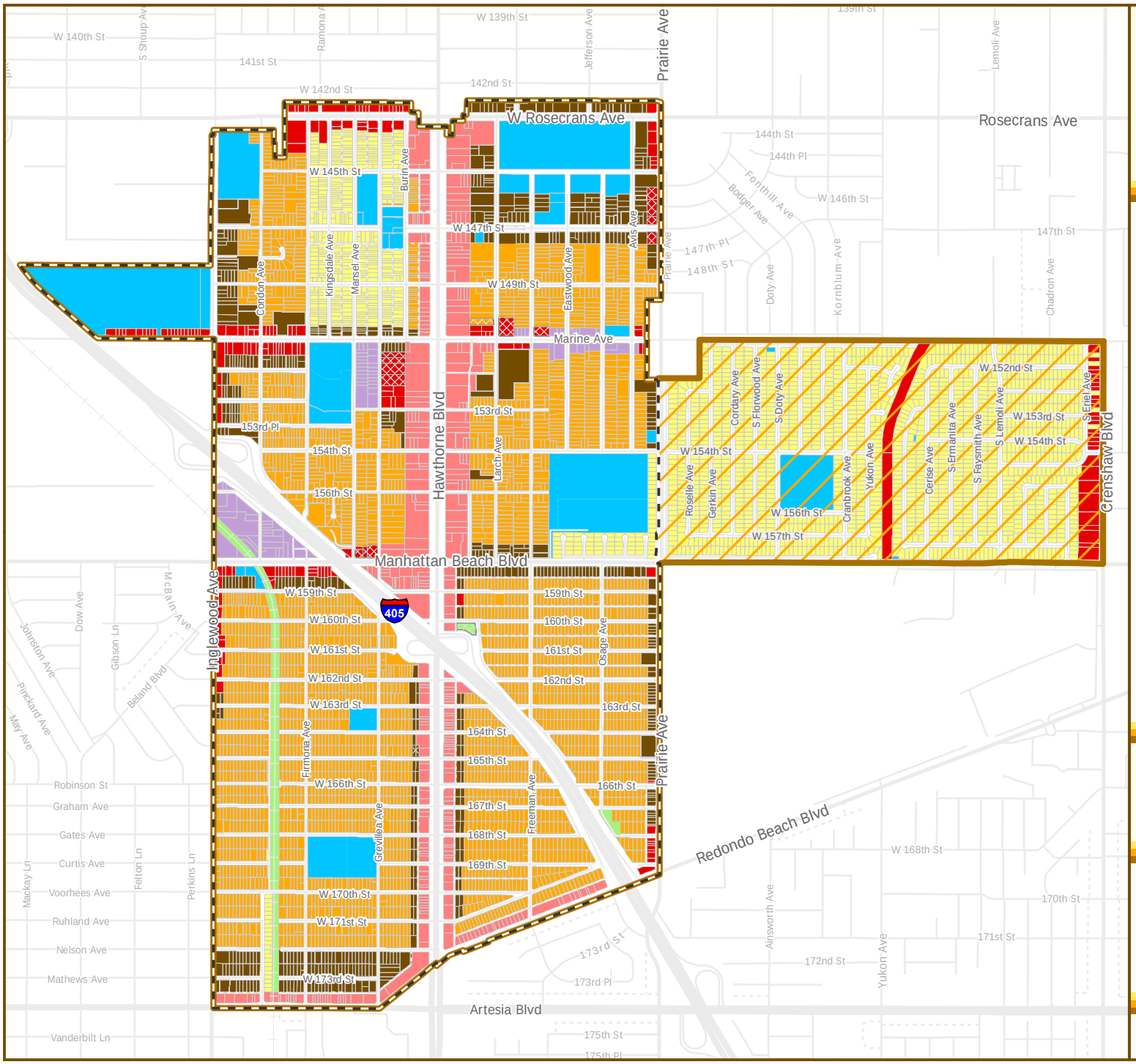
General Plan Land Use Designations	Existing Conditions				2045 Proposed General Plan (Project)				Net Change			
	Units	Pop.	NRSF	Jobs	Units	Pop.	NRSF	Jobs	Units	Pop.	NRSF	Jobs
City of Lawndale												
LDR	575	2,090	0	0	420	1,537	0	0	-155	-553	0	0
MDR	5,522	19,255	126,644	199	5,534	18,404	0	0	12	-851	-126,644	-199
HDR	3,229	9,190	50,934	80	3,464	9,418	0	0	235	228	-50,934	-80
C	120	365	487,809	768	311	706	836,681	1,673	191	341	348,872	905
I	55	184	336,957	531	0	0	459,130	612	-55	-184	122,173	81
OS	0	0	0	0	27	62	0	0	27	62	0	0
PF	0	0	1,124,243	1,125	0	0	1,124,243	1,124	0	0	0	-1
HBSP	391	1,125	2,174,447	3,424	3,931	11,017	2,484,823	4,970	3,540	9,892	310,376	1,546
City Total	**9,892**	**32,209**	**4,301,034**	**6,127**	**13,688**	**41,144**	**4,904,877**	**8,379**	**3,796**	**8,935**	**603,843**	**2,252**
Sphere of Influence (SOI)												
LDR	1,569	5,734	0	0	1,717	6,286	0	0	148	552	0	0
C	2	5	177,631	280	0	0	382,651	765	-2	-5	205,020	485
PF	0	0	63,498	63	0	0	63,498	63	0	0	0	0
SOI Total	**1,571**	**5,740**	**241,129**	**343**	**1,717**	**6,286**	**446,149**	**829**	**146**	**546**	**205,020**	**486**
Grand Total	***11,463***	***37,948***	***4,542,162***	***6,470***	***15,405***	***47,430***	***5,351,026***	***9,208***	***3,942***	***9,482***	***808,864***	***2,738***

Notes: LDR: low density residential; MDR: medium density residential; HDR: high density residential; C: commercial; I: industrial; OS: open space; PF: public facilities; HBSP: Hawthorne Boulevard Specific Plan; SOI: Sphere of Influence; Units: Housing Units; Pop.: Population; NRSF: Non-residential square footage; Numbers are rounded to the nearest whole number.
Source: De Novo Planning Group, Project Description, June 7, 2023.

Table 3 General Plan Update Growth Totals

Description	Housing Units	Population	Non-Residential Development (Square Feet)	Jobs
Existing Conditions	11,463	37,948	4,542,162	6,470
Proposed General Plan	15,405	47,430	5,351,026	9,208
Net Change	+3,942	+9,482	+808,864	+2,738

Source: De Novo Planning Group, Project Description, June 7, 2023.



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 1.
General Plan Update Land Use Map

LEGEND

- City of Lawndale
- Sphere of Influence Planning
- Area
- Assessor Parcel Boundary
- Housing Opportunity Overlay
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Hawthorne Blvd Specific Plan
- Industrial
- Open Space
- Public Facilities

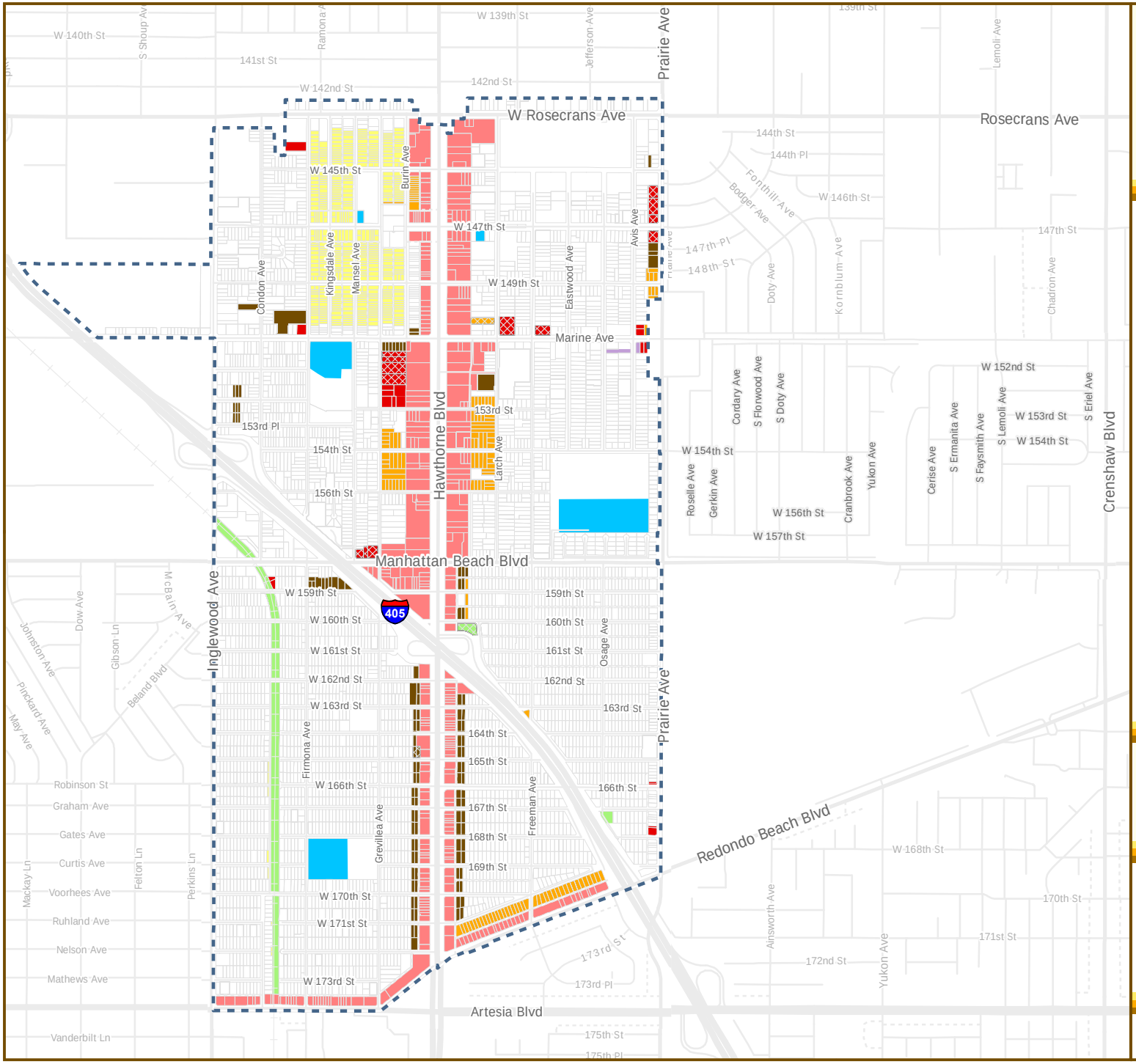
0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 20, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 2.
General Plan Update Land Use Change Map

LEGEND

- City of Lawndale
- Assessor Parcel Boundary
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Hawthorne Boulevard Specific Plan
- Industrial
- Open Space
- Public Facilities
- Housing Opportunity Overlay

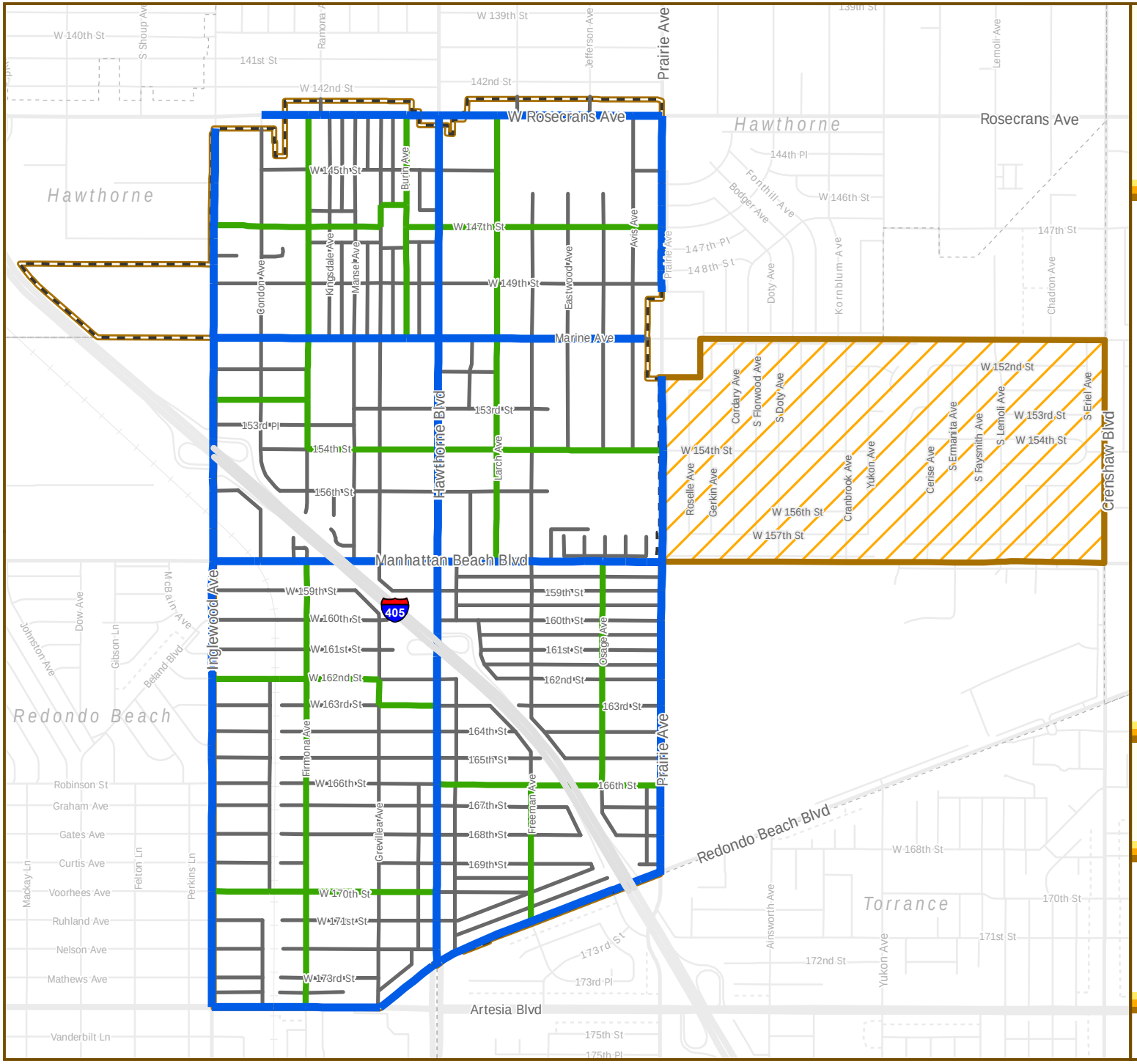
0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: October 27, 2022. Revised June 21, 2023

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 3. Roadway Functional Classifications Map

LEGEND

- Freeway
- Major Arterial
- Collector
- Local Street
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

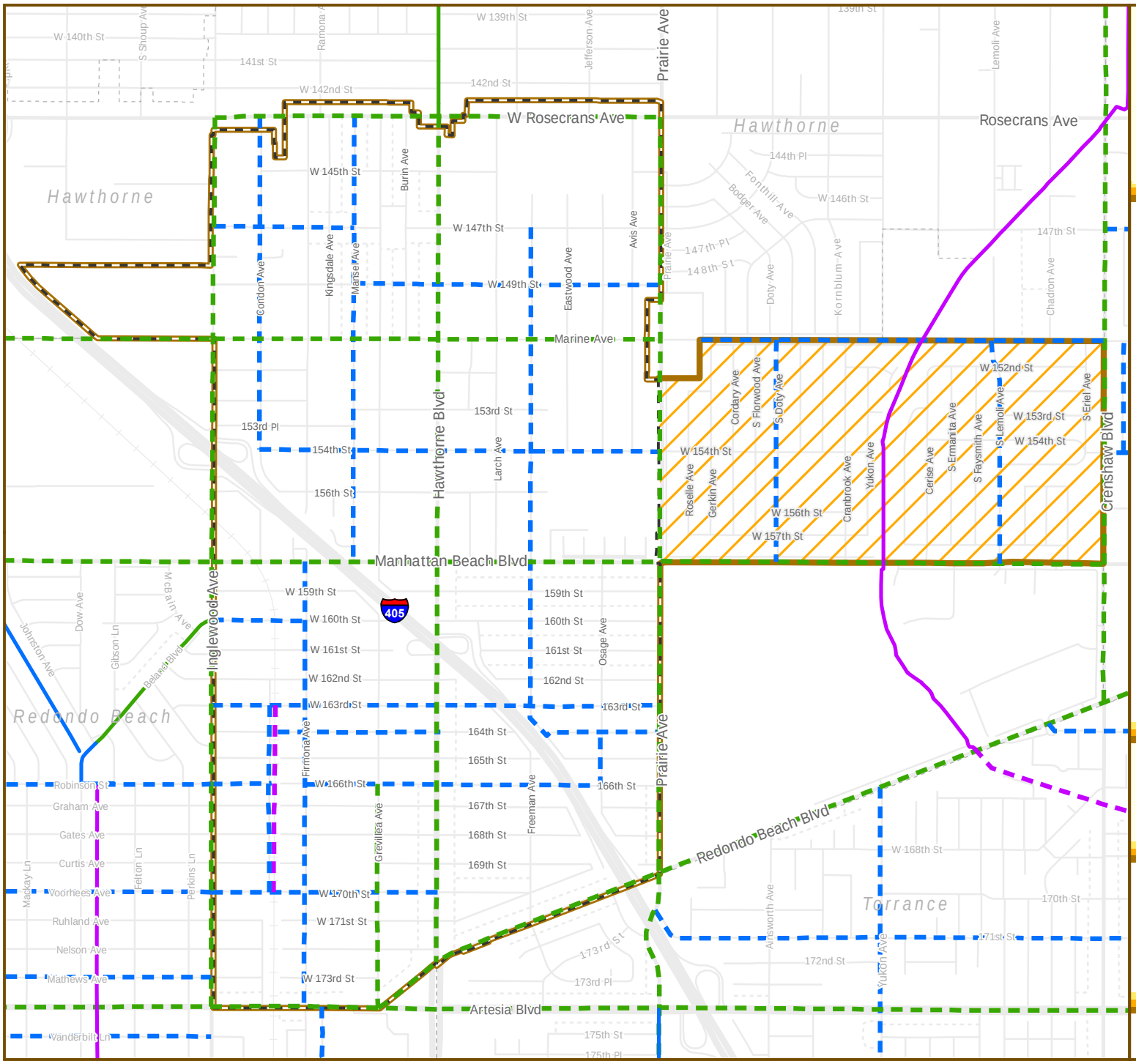
0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 4. Existing and Proposed Bicycle and Pedestrian Networks Map

LEGEND

Existing Bike Facilities

- Class I Bike Paths
- Class II Bike Lanes
- Class III Bike Routes
- Class IV Protected Bike Lanes

Proposed Bike Facilities

- Class I Bike Paths
- Class II Bike Lanes
- Class III Bike Routes
- Class IV Protected Bike Lanes
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

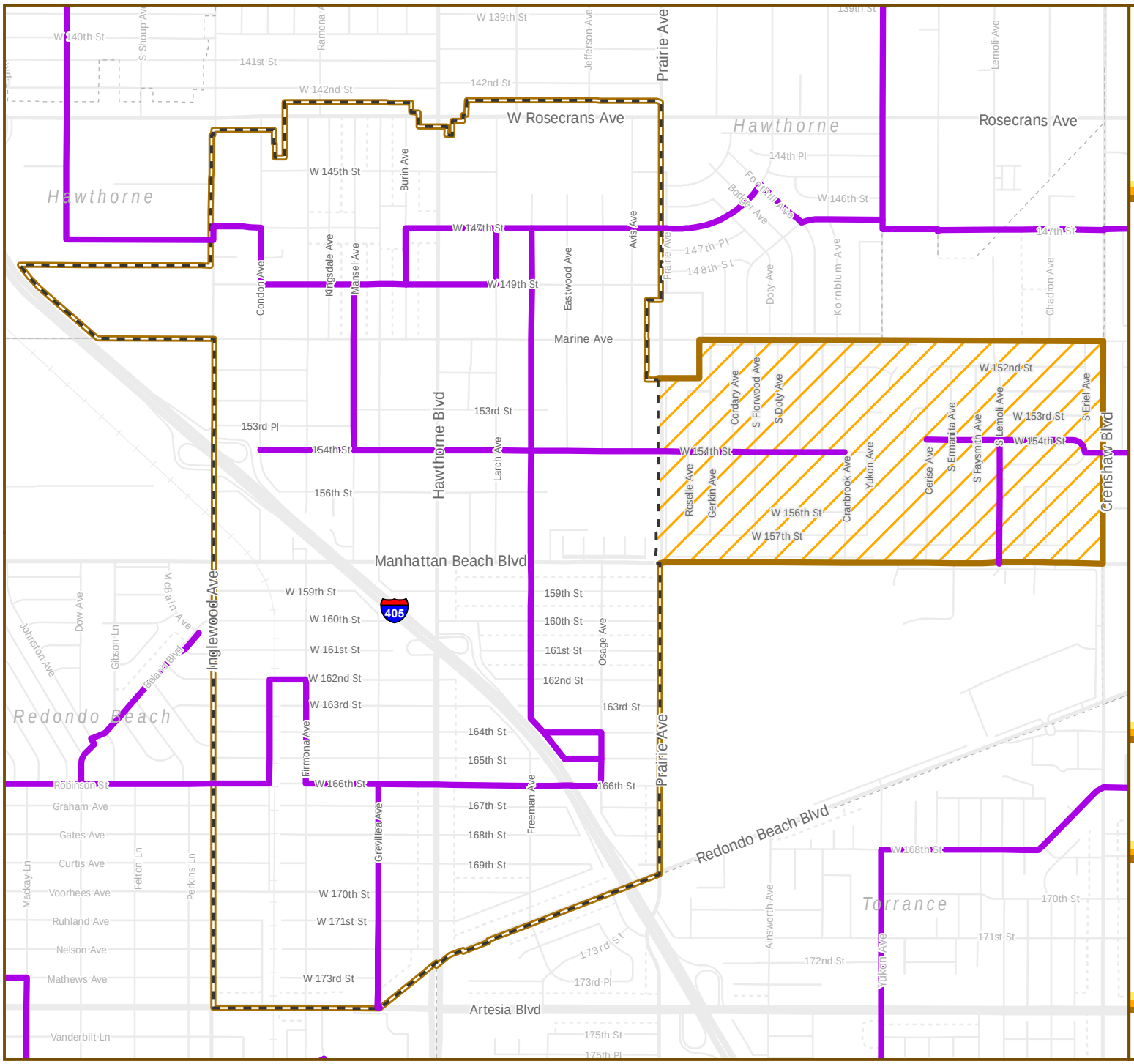
0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 5. Local Street Network Map

LEGEND

- Local Transportation Network
- City of Lawndale
- Sphere of Influence
- Planning Area
- Other Incorporated Area

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: March 21, 2023.

City of Lawndale

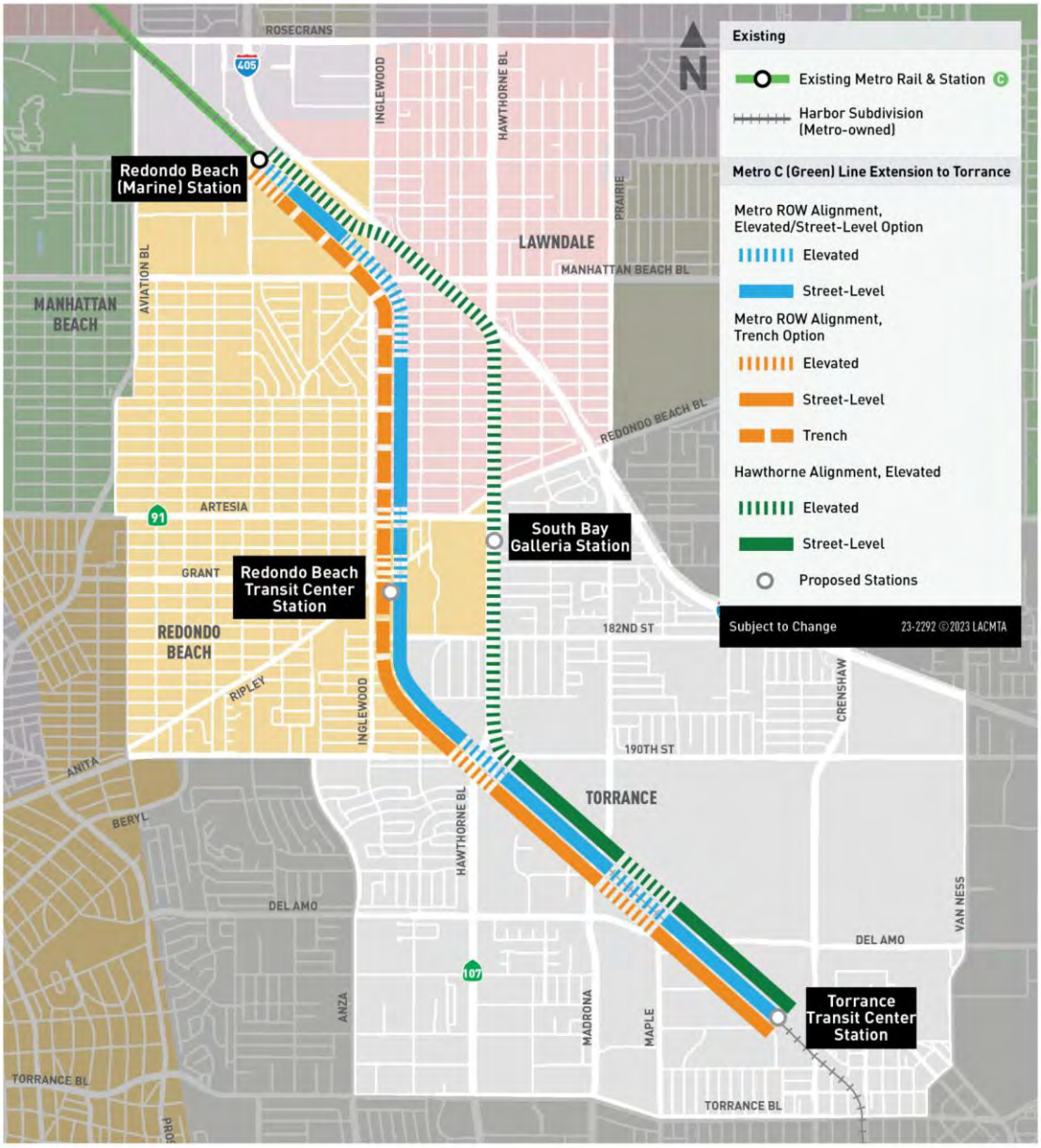
2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Figure 6.
Proposed Greenline Extension Project Map

C Line (Green) Extension to Torrance

Transit Project Study Area



Metro

REGULATORY FRAMEWORK

The regulatory framework applicable to the Project includes state, regional and local plans pertinent to the City of Lawndale and the California Environmental Quality Act (CEQA) review process for transportation and circulation.

STATE REGULATIONS

California Department of Transportation

The California Department of Transportation (Caltrans) manages the operation of state highways and is the primary state agency responsible for transportation issues. One of its duties is the construction and maintenance of the state highway system. Caltrans approves the planning, design, and construction of improvements for all state-controlled facilities, including I-405, and the associated interchanges. Freeway segments, freeway ramps and intersections associated with freeway on- and off-ramps fall under Caltrans jurisdiction. Hawthorne Boulevard is under Caltrans jurisdiction, however the City of Lawndale maintains it within City limits.

Caltrans has developed procedures to determine if state-controlled facilities require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and operational deficiencies at such facilities, Caltrans may recommend measures to address adverse effects from traffic caused by such projects. Caltrans also prepares comprehensive planning documents, including Corridor System Management Plans and Transportation Concept Reports, which are long-range planning documents that establish a planning concept for state facilities.

Caltrans updated its guidance in 2020 to include metrics to evaluate transportation impacts based on vehicle miles traveled (VMT) and no longer sets a minimum acceptable level of service (LOS) for its facilities. Based on the Caltrans *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*, Caltrans has transitioned from LOS performance standards to VMT to identify significant impacts.

> "For land use projects and plans, automobile delay is no longer considered a significant impact on the environment under CEQA (SB 743, 2013). Caltrans review of land use projects and plans is focused on a VMT metric, consistent with changes to the CEQA Guidelines (California Code of Regulations Section 15064.3(b)(1)). This VMT-focused TISG provides a foundation for review of how lead agencies apply the VMT metric to CEQA project analysis.
>
> Beyond or in addition to the use of the VMT metric, determining how the State Highway System may otherwise be affected by a land use project may still be necessary at times, particularly as it relates to the safety of the traveling public. Additional future guidance will include the basis for requesting transportation impact analysis that is not based on VMT. This guidance will include a simplified safety analysis approach that reduces risks to all road users and focuses on multi-modal conflict analysis as well as access management issues. With this guidance the Department will transition away from requesting LOS or other vehicle operations analyses of land use projects."[1]

[1] *Vehicle Miles Travelled- Focused Transportation Impact Study Guide, CalTrans, 2020.* https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf

Assembly Bill 32, Senate Bill 32, and Senate Bill 375

Assembly Bill (AB) 32, also known as the Global Warming Solutions Act of 2006, committed California to reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. In 2016, SB 32 added a new target: reducing statewide emissions to 40 percent below 1990 levels by 2030.

SB 375 provides guidance for curbing emissions from cars and light trucks to help California comply with AB 32. There are five major components to SB 375:

- Air Resources Board (ARB) will guide the adoption of GHG emission targets to be met by each Metropolitan Planning Organization (MPO) in the state.
- MPOs are required to create a Sustainable Communities Strategy (SCS) that provides a plan for meeting these regional targets. The SCS must be consistent with the Regional Transportation Plan (RTP).
- Regional housing elements and transportation plans must be synchronized on eight-year schedules. Also, the SCS and Regional Housing Needs Assessment (RHNA) must be consistent with each other.
- CEQA is streamlined for preferred development types such as mixed-use projects and transit-oriented developments (TODs) if they meet specific requirements.
- MPOs must use transportation and air emission modeling methodologies consistent with California Transportation Commission (CTC) guidelines.

California Complete Streets Act of 2008 (AB 1358)

Originally passed in 2008, California's Complete Streets Act took effect in 2011 and requires local jurisdictions to plan for land use transportation policies that reflect a "complete streets" approach to mobility. "Complete streets" comprises a suite of policies and street design guidelines which provide for the needs of all road users, including pedestrians, bicyclists, transit operators and riders, children, the elderly, and the disabled. From 2011 onward, any local jurisdiction—county or city—that undertakes a substantive update of the circulation element of its general plan must consider "complete streets" and incorporate corresponding policies and programs. In 2010, OPR released guidelines for compliance with this legislation which provide direction on how circulation elements can best plan for a variety of travel modes such as transit, walking, bicycling, and freight.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. SB 743 has fundamentally changed transportation impact analysis as part of CEQA compliance. In its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018), OPR provides recommendations for jurisdictions to implement SB 743-compliant transportation analyses. OPR's recommendations are not binding and lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence. Key guidance includes:

- VMT is the most appropriate metric to evaluate a project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office projects on a "per rate" basis. Specifically, OPR recommends VMT per capita for residential projects and VMT per employee for office projects.
- OPR's recommended impact threshold for residential and office projects is VMT per capita fifteen percent below the city or regional average (whichever is applied). In other words, an office project that generates VMT per employee that is more than 85 percent of the regional VMT per employee could result in a significant impact. This threshold is in line with statewide greenhouse gas emission reduction targets.

- For retail projects, OPR recommends measuring the net decrease or increase in VMT in the study area with and without the project. The recommended impact threshold is any increase in total VMT.
- Lead agencies ultimately have the discretion to set or apply their own significance thresholds, provided they are based on significant evidence.
- Cities and counties still can use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for CEQA impacts.

For land use and transportation projects, SB 743-compliant CEQA analysis became mandatory on July 1, 2020.

CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed under SB 743. It states that in general transportation impacts are best measured by evaluating the project's vehicle miles traveled. For land use projects, VMT exceeding an applicable threshold of significance may indicate a significant impact (OPR 2017). The City has not adopted VMT criteria to evalaute transportation impacts under CEQA. For the purpose of this analysis, the Governor's Office Planning and Research (OPR) technical advisory is being used for the traffic impact analysis guidelines. The technical advisory serves as a tool for the City to evaluate the effects a development will have on the City's transportation infrastructure, identify improvements required to maintain the Level of Service (LOS) standards and address Section XV (Transportation/Traffic) of Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

REGIONAL REGULATIONS

Southern California Association of Governments (SCAG)

SCAG is a federally designated MPO and is made up of six counties and 191 cities. SCAG develops long-range regional transportation plans including sustainable communities' strategies and growth forecast components, regional transportation improvement programs, regional housing needs allocations, and a portion of the South Coast Air Quality Management Plans.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. Connect SoCal outlines more than $638 billion in transportation system investments through 2045.

Los Angeles County Metropolitan Transportation Authority

The Los Angeles County Metropolitan Transportation Agency (Metro) coordinates transportation planning efforts throughout Los Angeles County and programs local, regional, state and federal funding for project implementation. Additionally, it prepares the Congestion Management Program (CMP), a plan mandated by California law to describe the strategies to address congestion problems on the CMP network, which includes State highways and principal arterials. The CMP Guidelines require analysis of the Metropolitan Transportation System (MTS) roadway and transit system and uses level of service standards to measure congestion and to determine how local governments meet CMP standards.

The 2020 Long Range Transportation Plan (LRTP) provides a detailed roadmap for how Metro will plan, build, operate, maintain, and partner for improved mobility in the next 30 years. The LRTP guides future funding plans and policies needed to move LA County forward for a more mobile, resilient, accessible and sustainable future. The adopted 2020 plan lays out a strategy for meeting transportation needs for all users in LA County and includes projects and other improvements for new and existing freeways, local streets, and public transit (paratransit, buses, rails, ferries), as well as facilities and programs to support bicycling and walking.

Metro has several countywide planning efforts that outline regional networks and provide guidance on best practices. These plans include the Countywide Multimodal Arterial Plan, the Countywide Goods Movement Plan, the Countywide Transit Plan, the Active Transportation Strategic Plan, and the First Last Mile Strategic Plan.

As previously discussed, Metro has plans to extend the C Line from Redondo Beach Station to the new Torrance Transit Center, which would travel through the City. Metro is considering three configuration alternatives, two along Metro-owned ROW and one along Hawthorne Boulevard. The determination of the locally preferred alternative is anticipated in 2023.

South Bay Bicycle Master Plan

The 2011 South Bay Bicycle Master Plan, prepared for the Los Angeles County Bicycle Coalition and the South Bay Bicycle Coalition, aims to develop and maintain a cohesive and connected bicycle network and policy strategy for the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance. The plan proposes the installation of 213 additional miles of bike facilities, including over 20 miles of bicycle facilities within Lawndale. The plan generally recommends adding Class II bicycle lanes to the City's arterial streets and designating key collector and local streets as "bike-friendly streets".

South Bay Cities Council of Governments

The South Bay Cities Council of Governments (SBCCOG) is a joint powers authority government agency of 16 cities and Los Angeles County. SBCCOG developed the Local Travel Network (LTN) to support the growing local use of "micromobility" and the use of zero-emission, slow speed vehicles. Such devices include neighborhood electric vehicles (NEVs)—which appear similar to golf carts, e-bikes, non-motorized pedal bikes, e-scooters, e-bikes and other "novelty" zero-emission, slow speed mobility devices such as one-wheels (electric skateboards).

In May 2021, the SBCCOG board passed a resolution that directed the SBCCOG to begin implementation of the Local Travel Network in the South Bay. The scope of creating a 243-mile LTN necessitated it be implemented in phases. The initial phase was separated into two (2) corridor projects:

- Phase 1: El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach
- Phase 2: Hawthorne, Lawndale, Gardena, Inglewood, Carson, Lomita, Torrance, areas of unincorporated Los Angeles County as well as the communities of Wilmington, Harbor City, and San Pedro.

The implementation of the Local Travel Network will continue into the foreseeable future.

LOCAL REGULATIONS

With the exception of State highways that are under Caltrans' jurisdiction, streets in Lawndale are generally under the jurisdiction of the City.

Lawndale General Plan

The current Lawndale General Plan, adopted in 1991 and amended in 1992, is the primary planning document for the City and serves to guide new development and infrastructure in the city. The General Plan Circulation Element provides the policy framework for the regulation and development of transportation systems, balancing demands for moving people and goods within the city. In particular, the Circulation Element addresses vehicular, pedestrian, bicycle, transit, goods movement, and rail transportation, plus parking. The General Plan Update has a 2045 planning horizon.

Proposed Lawndale General Plan Mobility Element

The General Plan's Community Mobility and Circulation Element provides guidance on expanding options for transit, bicycle, and pedestrian mobility while continuing to support programs that improve automobile travel. The following goals and policies are the most relevant for the purpose of this analysis:

GOAL 1: Local Circulation System | A community served by a safe circulation system with sufficient traffic flow on arterial roadways and minimized adverse traffic effects on residential neighborhoods.

- **Arterial Roadway Network**. Implement the buildout roadway network based on the classifications mapped in Figure M-1 in order to accommodate existing and future needs due to land use growth and shifts in travel patterns.
- **Vehicle Level of Service (LOS)**. Maintain vehicular LOS "D" along major City intersections whenever possible. The City may exempt locations from the LOS "D" target due to right-of-way constraints, and to align to community goals and to balance the needs for different road users including pedestrians and cyclists.
- **Traffic System Management**. Facilitate the efficient movement of vehicles and minimize delay utilizing existing roadway facilities.
- **Rail Crossings Traffic Operations**. Collaborate with Metro to provide adequate intersection operations at at-grade crossing locations to minimize delays and congestion and to create safe crossings for all users.
- **Development-Related Traffic Impacts**. Require new development to provide appropriate and feasible improvements as condition of approval so they do not adversely affect traffic flow and roadway operations.
- **Effects of New Technologies on Traffic Flow.** Maximize the benefit to the public of technologies and services such as ride hailing, autonomous vehicles, electric bicycles and scooters without adversely affecting the City's transportation network.
- **Traffic Calming on Local Streets**. Encourage traffic calming strategies and incorporation of traffic calming design in residential and school areas to slow traffic and promote safety.

GOAL 2: Regional Circulation | A City that coordinates with neighboring jurisdictions and regional agencies to promote consistent and efficient regional circulation.

- **Freeway Interchanges**. Coordinate with Caltrans to develop appropriate configurations and operations at Interstate 405 interchange intersections to minimize congestion on City streets.
- **Agency Coordination**. Coordinate with regional agencies such as County of Los Angeles, South Bay Cities Council of Governments, and Metro to meet the mobility needs of people living in, working in, or visiting Lawndale.
- **Neighboring Jurisdictions**. Plan and implement vehicular facilities, roadway treatments, active transportation facilities, transit routes, and goods movement network to be connected with those in neighboring jurisdictions.

GOAL 3: Complete Streets | A community with a well-designed and built transportation network that is safe, accessible, comfortable, and convenient for all transportation modes and users.

- **Complete Streets for Roadway Projects**. Apply Complete Streets principles to all transportation improvements projects (e.g. safety, intelligent transportation systems, roads and intersections widening, transit facilities).
- **Multimodal Connectivity**. Link activity centers, employment centers, public facilities, and schools to transit and active transportation facilities, wherever feasible.
- **Streetscape Improvements**. Require roadway, sidewalk, and median improvements that enhance the visual character of the roadway system and promote pedestrian and bicycle safety.
- **ADA Accessibility**. Implement a transportation network that is safe, accessible, and consistent with the Americans with Disabilities Act (ADA), to allow mobility-impaired users, such as disabled persons and seniors, to safely travel within the City.

- **Safe Routes to School**. Provide infrastructure improvements, enforcement and incentives to support Safe Route to School programs and promote walking and bicycling to local schools.

GOAL 4: Parking | A community with an adequate parking supply to support business vibrancy and a high quality of life.

- **New Development Parking Supply**. Ensure new residential and non-residential developments provide adequate parking supply to meet demand and reduce spillover to surrounding areas.
- **Effects of New Technologies on Parking Demand**. Monitor the development of mobility new technologies and the potential effects on parking demand.
- **Parking Demand and Supply Trends**. Monitor and consider trends in the region pertaining to reduced parking demand for transit-oriented developments, mixed-use developments, and other high activity areas and the allocation of parking for shared vehicles, alternative energy vehicles, bicycles, and other modes of transportation.
- **Hawthorne Boulevard Specific Plan Parking**. Consider the development of a parking management plan to ensure developments within the Hawthorne Boulevard Specific Plan provide adequate parking supply to meet demand in the area. The plan may include flexible parking principles, such as shared parking, and may consider timing and pricing strategies, and adding supply with the development of parking structures.

GOAL 5: Transit | A community with a comprehensive public transportation system.

- **Transit Use**. Support programs encouraging public transit use by people living in, working in, or visiting Lawndale.
- **Improve Local Public Transit Service**. Work with Metro, Lawndale Beat Bus, and other local public transit providers to plan and improve local transit service and transit facilities, including bus stops, in the City.
- **Transit Facilities**. Require new developments to construct, when appropriate, transit facilities, including bus turn-outs, lighted bus shelters, and route information signage.
- **Paratransit Service**. Work with local transit and other providers to support paratransit service for seniors and persons with disabilities.
- **C (Green) Line Service**. Work with Metro to ensure C (Green) Line service (including headways and service hours) are sufficient to meet the needs of transit commuters to and from Lawndale.
- **C (Green) Line Stations**. Work with Metro to ensure the planned C (Green) Line extension project implementation is consistent with the City's Complete Streets, active transportation, and parking policies, and that it provides pedestrian and bicycle connectivity between neighborhoods within Lawndale and future stations.
- **Effects of New Technologies on Transit Use**. Monitor the development of new mobility technologies and the potential effects on transit demand and how users access public transit.

GOAL 6: Active Transportation | A community with a comprehensive network of pedestrian and bicycle facilities that encourages active transportation.

- **Bicycle Master Plan**. Implement the South Bay Bicycle Master Plan within City limits to provide active transportation facilities that can serve as an alternative to automobiles, including the Plan's facility recommendations.
- **Local Travel Network**. Coordinate with the South Bay Cities Council of Governments to implement the Local Travel Network plan to promote micro-mobility modes through the City of Lawndale and support efforts to integrate the network with adjacent cities.
- **Hawthorne Boulevard Sidewalks**. Allow for modified sidewalk standards and encourage enhanced pedestrian amenities along Hawthorne Boulevard to reflect the corridors unique character and land use vision.
- **Sidewalk and Bikeway Gaps**. Create a connected and complete active transportation network by identifying and eliminating gaps in sidewalks and bikeways.
- **Bicycle/Pedestrian Facilities at New Developments**. Require new residential and non-residential developments in the city to provide safe and attractive bicycle and pedestrian facilities, such as secure bicycle parking, pedestrian-scale lighting, street furniture, landscaping, and other improvements.

- **Effective Roadway Projects**. Consider the implementation of projects within the South Bay Bicycle Master Plan when roadways are being rehabilitated or resurfaced.
- **Effects of New Technologies on Active Transportation**. Monitor the development of mobility new technologies and the potential effects on designing a transportation network that accommodates all modes and users.

GOAL 7: Goods Movement | A community that integrates safe and efficient goods movement into the local transportation network.

- **Local Truck Routes**. Maintain a network of local truck routes to facilitate goods movement to regional roads and to discourage the use of residential roads.
- **Roadway Design**. Maintain roadway design standards to facilitate access to light industrial and manufacturing areas along designated truck routes.

GOAL 8: Funding | A community with a well-funded and fiscally sound transportation system that utilizes a variety of funding methods.

- **Innovative Funding**. Research and pursue innovative funding sources at the federal, state, regional, and county level to implement transportation projects.
- **Regional Funding**. Encourage regional agencies to continue to provide adequate transportation funding to local jurisdictions such as Metro's Measure R and Measure M to fund capital projects and programs.
- **Development Fees**. Ensure that new development projects contribute their appropriate fair share to transportation network improvements.

GOAL 9: Transportation Management | A community with transportation management strategies that contributes to achieving regional and statewide greenhouse gas emission targets.

- **Vehicle Miles Traveled Guidelines**. Consider adopting vehicle miles traveled (VMT) guidelines and thresholds for transportation analysis for the purposes of environmental review under the California Environmental Quality Act (CEQA). The City shall continue to maintain Level of Service (LOS) standards for the purposes of planning and designing street improvements.
- **Transportation Demand Management**. Require transportation demand management (TDM) strategies as mitigation measures for new projects that exceed the City's thresholds Vehicle Miles Traveled impact thresholds.
- **Regional Coordination**. Encourage regional agencies such as Metro, the South Coast Air Quality Management District (SCAQMD), and the South Bay Cities Council of Governments to promote TDM programs that reduce single occupancy vehicle travel.
- **New Development**. Work with developers to reduce greenhouse gas emissions and minimize congestion related to new development through improvements to the circulation system and on-site improvements that encourage public and active modes of travel.

Hawthorne Boulevard Specific Plan

As a supplement to the 1992 General Plan, the currently adopted Hawthorne Boulevard Specific Plan was developed in 1999. The Plan outlined a long-term vision for land use and development standards, circulation improvements, and an overall vision for streetscape to help make Hawthorne Boulevard a successful urban corridor. In 1998, Lawndale citizens voted to approve up to $15 million for the physical improvement of Hawthorne Boulevard. Figure 7 shows the Hawthorne Boulevard Specific Plan area within Lawndale.

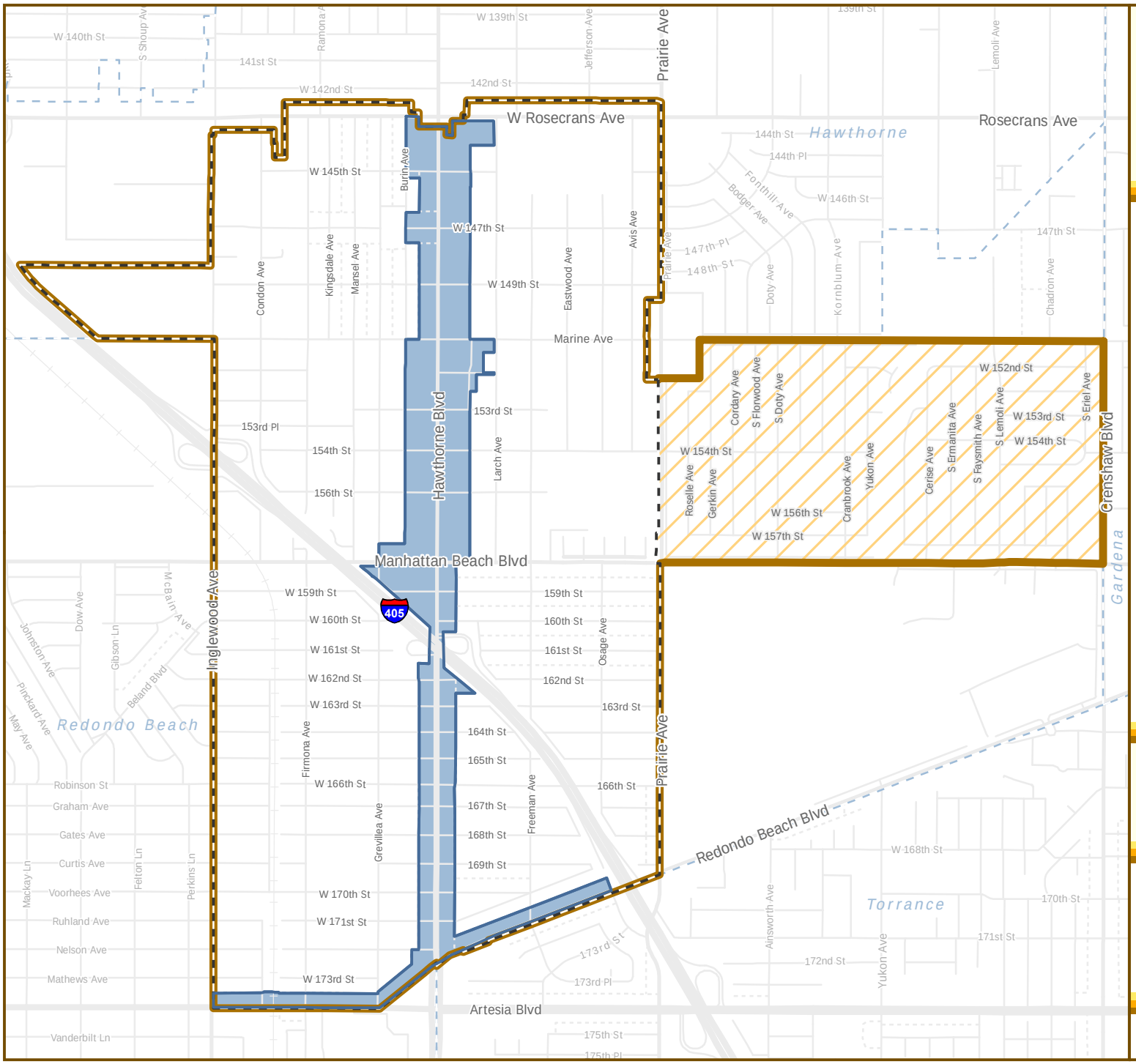
Lawndale Parkway Design Policy Guidelines

First developed in 2018 and updated in July 2020, the Lawndale Parkway Design Policy Guidelines outlines specific guidelines and standards for parkways in the City. Parkways are defined as a portion of the public right-of-way that includes the strip of land between the street and the walkway. In Lawndale, property

owners adjacent to the parkway are responsible for maintaining the area, except for street trees that are maintained by the City.

CITY OF LAWNDALE
GENERAL PLAN UPDATE

Figure 7.
Hawthorne Boulevard Specific Plan Map



LEGEND

- City of Lawndale
- Sphere of Influence
- Planning Area
- Adjacent Incorporated
- Hawthorn Boulevard Specific Plan Boundary

0 500 1,000
Feet

Sources: City of Lawndale; Los Angeles County.
Date: June 20, 2023.

City of Lawndale
The Beach of the Southbay

2020 GENERAL PLAN &
HAWTHORNE BOULEVARD SPECIFIC PLAN UPDATE

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

EXISTING CIRCULATION SYSTEM

ROADWAY NETWORK

Street design, connectivity, and the overall built environment influence transportation choices and quality of life. The City of Lawndale is supported by a network of core regional streets, including Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Manhattan Beach Boulevard, Marine Avenue, Rosecrans Avenue, Redondo Beach Boulevard, and Artesia Boulevard, plus several smaller connecting streets that provide local connectivity. Much of the street network was designed to prioritize cars over other modes of transportation. This is demonstrated by the abundance of public parking, wide streets and travel lanes, and limited pedestrian and bicycle connectivity and amenities. Key streets which are depicted in Figure 3 include:

- **Hawthorne Boulevard** is a major north-south roadway that spans the length of the city. It is a six to eight lane corridor (with three to four lanes in each direction) with on-street parking and a wide center median which is used for parking in some sections. The travel lanes are generally 12 to 14 feet wide, with wider outside lanes to accommodate on-street parking. On-street curbside parallel parking is permitted on both sides of Hawthorne Boulevard during specific timeframes. Two-hour parking is permitted in the center median outside the hours of 2:00 am – 4:00 am. The surrounding land context is primarily commercial, and the corridor provides direct access to I-405 south of Manhattan Beach Boulevard. Hawthorne Avenue acts as a major transit corridor, serving transit riders through LA Metro lines 40 and 740 (Rapid), as well as through Lawndale Beat's Express and Residential Routes. The posted speed limit is 35 miles per hour. South of I-405, Hawthorne Boulevard is also known as California State Route 107 (SR-107). Hawthorne Boulevard is under Caltrans jurisdiction, however the City of Lawndale maintains it within City limits.
- **Inglewood Avenue** is a major north-south connection through the city and forms the majority of Lawndale's western boundary. Inglewood Avenue includes an interchange with I-405 south of Marine Avenue. South of I-405, where Inglewood Avenue abuts mostly residential land uses, the corridor is divided by a median. Three travel lanes are provided in each direction, with the outside lanes serving as flex lanes that flex between through travel lanes and on-street parking. On-street parking is not permitted in the northbound direction from 7:00 am – 9:00 am daily and Monday and Thursdays from 4:00 pm – 7:00 am. In the southbound direction, on-street parking is not permitted from 3:00 pm – 7:00 pm and on Wednesdays from 11:00 am – 2:00 pm. North of I-405, the surrounding land use includes commercial properties, and the roadway has two to three lanes in each direction with a center turn lane and no on-street parking. Between Marine Avenue and Rosecrans Avenue, there are several schools and a major commercial/shopping center. The posted speed limit is 40 miles per hour south of I-405 and 35 miles per hour north of I-405.
- **Prairie Avenue** runs in the north-south direction and forms the eastern boundary of Lawndale. It primarily includes two travel lanes in each direction with a two-way center left-turn lane. On-street parking is available throughout the corridor, except for northbound north of Manhattan Beach Boulevard. South of Marine Avenue, Prairie Avenue is mostly residential and is adjacent to Alondra Park and Golf Course, Will Rogers Middle School, and Anderson Elementary School. North of Marine Avenue, the roadway is surrounded by commercial uses, including a major shopping area at Rosecrans Avenue. The posted speed limit is 40 miles per hour.
- **Manhattan Beach Boulevard** is an east-west corridor that connects Lawndale to Manhattan Beach to the west and Gardena to the east. It has two lanes in each direction, divided by a median. On-street parking is available on both sides of the street. Manhattan Beach Boulevard passes through an industrial area between Inglewood Avenue and I-405, crossing the Harbor Subdivision railway line. East of I-405, it provides access to residential areas and intermittent commercial development. Manhattan Beach Boulevard does not provide direct access to I-405. The posted speed limit is 40 miles per hour.
- **Marine Avenue** is an east-west corridor with two lanes in each direction, undivided with an intermittent center left-turn lane. On-street parking is available in both directions except on Tuesday and Fridays

from 4:00 am – 7:00 am. Marine Avenue is mostly adjacent to commercial and light industrial land uses and provides access to several key destinations, including the LA Metro C Line (Green Line) station, Lawndale High School, and Jane Addams Park. The posted speed limit is 40 miles per hour.

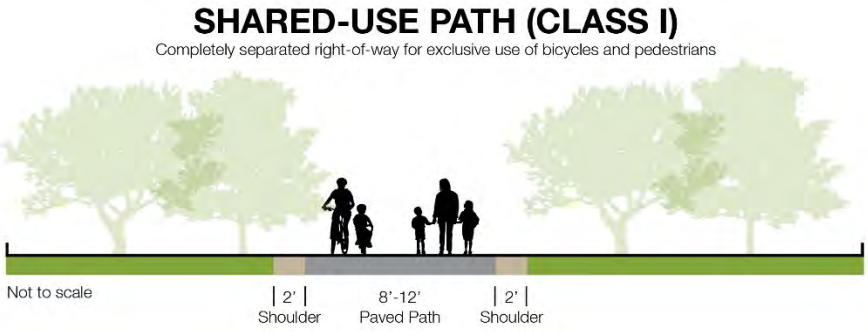
- **Rosecrans Avenue** is a major east-west corridor that forms the northern boundary of the City. Rosecrans Avenue has three travel lanes in each direction with a continuous center left-turn lane. On-street parking is available outside the hours of 6:30 am – 6:00 pm on both sides of the road. Major commercial and residential developments and schools, including Leuzinger High School, are present along the corridor. The posted speed limit is 40 miles per hour.
- **Redondo Beach Boulevard:** runs along the southern boundary of the City and is a major thoroughfare connecting Lawndale to Gardena in the east and Redondo Beach to the west. The corridor has two travel lanes in each direction with a continuous center left-turn lane. On-street parking is permitted throughout from 7:00 am – 6:00 pm, except Tuesdays and Fridays from 4:00 am – 7:00 am. Land use along the corridor is primarily a mix of multi-family residential and commercial. The corridor also provides access to the I-405 freeway.
- **Artesia Boulevard:** is an east-west corridor along the southern boundary of the city. Artesia Boulevard has three travel lanes in the eastbound direction and two travel lanes in the westbound direction with a raised center median. On-street parking is available in the westbound direction only. The corridor provides direct access to numerous commercial buildings, including the South Bay Galleria mall.

BICYCLE AND PEDESTRIAN FACILITIES

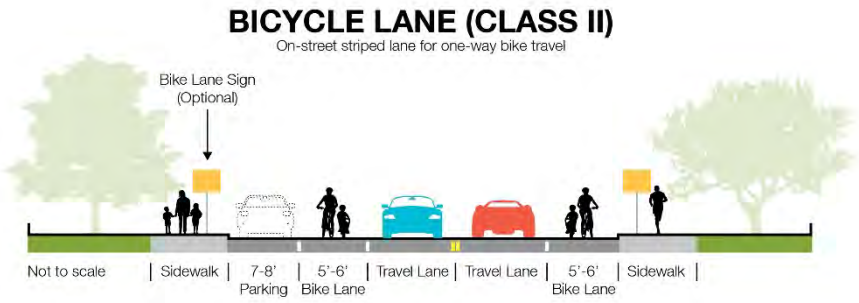
The City of Lawndale does not currently provide any bicycle facilities on its street network. Facilities have been proposed through several documents and plans, including the South Bay Bicycle Master Plan (2011), the Los Angeles County Bicycle Master Plan (2012), and the LA Metro Bicycle Transportation Strategic Plan (2006). However, there are currently no bike-related projects included in Lawndale's Capital Improvements Program.

Figure 4 displays the planned bike facilities in Lawndale and in its immediate vicinity. Caltrans categorizes bicycle facilities into four types, as described and depicted in illustrations below. Note that while the graphics include typical widths for each facility type, the exact configuration can vary depending on location and the jurisdiction's preference.

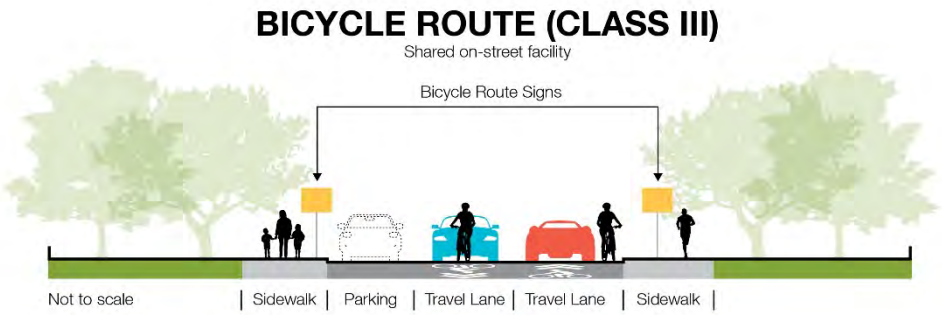
- **Class I Bikeway (Bike Path).** Also known as a shared path or multi-use path, a bike path is a paved right-of-way for bicycle travel that is completely separate from any street or highway.



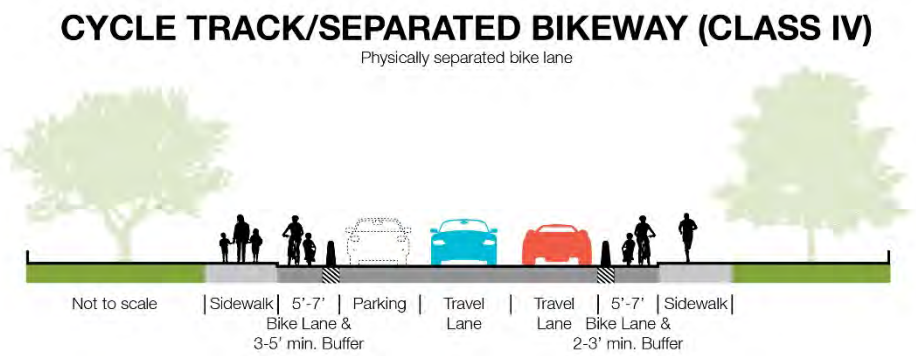
- **Class II Bikeway (Bike Lane).** A striped and stenciled lane for one-way bicycle travel on a street or highway. This facility could include a buffered (typically painted) space between the bike lane and vehicle lane and the bike lane could be adjacent to on-street parking.



- **Class III Bikeway (Bike Route).** A signed route along a street where the bicyclist shares the right-of-way with motor vehicles. This facility can also be designated using a shared-lane marking (sharrow).



- **Class IV Bikeway (Separated Bike Lane).** A bikeway for the exclusive use of bicycles including a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.



I-405 represents a major barrier for bicyclists in both the north/south and east/west direction. The only roadways that provide access under the freeway are Inglewood Avenue, Hawthorne Boulevard, Manhattan Beach Boulevard, 166th Street, and Redondo Beach Boulevard. The Metro rail ROW also presents a challenge to bicyclists, especially in the residential area south of Manhattan Beach Boulevard. The only available railway crossings south of Manhattan Beach Boulevard are at 159th Street, 160th Street, 161st Street, 162nd Street, and 170th Street.

Most streets have paved sidewalks on both sides of the street. Crosswalks are generally provided at signalized or stop-controlled intersections on the arterial and collector roads. They are generally standard crosswalks and on all four approaches. Skewed crossings are common along principal arterials and cause longer pedestrian crossing times and distances. However, the City of Lawndale's overall automobile-centric design creates long walking distances due to the nature of larger block sizes.

TRANSIT SERVICES

Transit service in Lawndale is primarily provided by Metro, whose transportation system provides bus and passenger rail service throughout Los Angeles County, and by Lawndale Beat, a local agency that runs fixed-route bus service throughout Lawndale. The adjacent cities of Gardena and Torrance also provide local transit options that operate through Lawndale.

LA Metro

LA Metro provides bus, light rail, and heavy rail service for travel within Los Angeles County. LA Metro currently offers bus service throughout Lawndale, including local and rapid fixed-route services. LA Metro's transit stops are often shared stops with the Lawndale Beat. Three major shared transit stops are located just outside of the city limits –at the LA Metro C Line (Green Line) terminus near Marine Avenue and Redondo Beach Avenue, on Douglas Street north of Rosecrans Avenue, and at South Bay Galleria south of Artesia Boulevard. Table 4 displays the LA Metro routes that currently serve Lawndale.

While LA Metro does not offer rail service through Lawndale, the C Line (Green Line) ends just west of the City limits at the Redondo Beach Station on Marine Avenue, west of I-405. As previously discussed, Metro has conducted an environmental analysis and is considering alignments to extend the C Line (Green Line) approximately 4.6 miles south through Lawndale into Torrance by 2028.

Table 4 LA Metro Bus Service in Lawndale

Route	Route Type	Route Description
40	Local	Downtown Los Angeles to South Bay Galleria via Martin Luther King Boulevard and Hawthorne Boulevard
125	Local	El Segundo to Norwalk Station via Rosecrans Avenue
210	Local	Hollywood/Vine Station to South Bay Galleria via Crenshaw Boulevard
211	Local	Inglewood to South Bay Galleria via Prairie Avenue/Inglewood Avenue
215	Local	Inglewood to South Bay Galleria via Prairie Avenue/Inglewood Avenue

Lawndale Beat

Lawndale Beat provides a local transit option through the operation of two fixed-route bus routes: Express Route and Residential Route. The Express Route offers service from LA Metro's C Line (Green Line) Station on Marine Avenue to the Galleria at South Bay shopping area south of Artesia Boulevard on Hawthorne Boulevard. The Residential Route provides service to various residential areas, parks, schools, and shopping areas.

The Express Route operates with a 40-minute headway, running from 7:20 am to 5:55 pm on weekdays, 8:40 am to 5:55 pm on Saturdays, and 9:20 am to 3:55 pm on Sundays and holidays. The Residential Route has a 50-minute headway, running from 7:00 am to 6:39 pm on weekdays, 8:40 am to 5:49 pm on Saturdays, and 10:20 am to 5:49 pm on Sundays and holidays. Stops for both routes are often shared with LA Metro routes.

During the COVID-19 pandemic, the Lawndale Beat Transportation service suspended service. However, the service resumed on May 15, 2023.

Other Transit Agencies

The neighboring cities of Gardena and Torrance operate fixed-route bus service that serves areas within and surrounding Lawndale. Gardena's GTrans Line 1X runs along Marine Avenue through Lawndale, connecting Gardena to LA Metro's C Line (Green Line); and Line 3 runs along Redondo Beach Boulevard to South Bay Galleria. Torrance Transit's Lines 2, 8, and 13 also run through Lawndale along Artesia Boulevard, the City's southern boundary.

CEQA SIGNIFICANCE THRESHOLDS

TRANSPORTATION SIGNIFICANCE CRITERIA

In accordance with Appendix G of the CEQA Guidelines, the Project would be considered to have a significant transportation impact if it would:

a) conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
b) conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
c) substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
d) result in inadequate emergency access.

Significance criteria "b" is related to the implementation of vehicle miles traveled (VMT) as the primary performance metric consistent with SB 743 as described above.

SPECIFIC TRANSPORTATION THRESHOLDS

The thresholds used for the CEQA categories are summarized below.

Conflict with Program/Plan/Ordinance/Policy

The following thresholds are used to evaluate impacts for CEQA Appendix G Item (a).

The Project will be qualitatively evaluated to determine if it is expected to conflict with a relevant programs, plans, ordinances, and policies related to the circulation system. A conflict could occur if the proposed Project would preclude the ability of Lawndale to implement its goals or policies. For the purpose of this analysis, the Project could result in a significant impact if it results in a conflict with any adopted City of Lawndale programs, plans, ordinances, and policies.

Generally, a plan/project causes a significant impact to transit facilities and services if an element of it conflicts with existing or planned transit services. The evaluation of transit facilities shall consider if:

- a plan or project creates demand for public transit services above the capacity that is provided or planned;
- a plan or project or related mitigation disrupts existing transit services or facilities;
- a plan or project or related mitigation conflicts with an existing or planned transit facility; or
- a plan or project or related mitigation conflicts with transit policies adopted by the City of Lawndale for its respective facilities.

The City's Mobility Element describes the related policies necessary to ensure that pedestrian and bicycle facilities are safe and effective for Lawndale residents, employees and visitors. Using the Mobility Element as a guide, significant impacts to these facilities would occur when a plan or project:

- creates a hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interferes with pedestrian accessibility; or
- conflicts with an existing or planned pedestrian or bicycle facility; or
- conflicts with policies related to bicycle and pedestrian facilities as adopted by the City of Lawndale for its respective facilities.

Conflict with CEQA Guidelines for VMT

The following thresholds are used to evaluate impacts for CEQA Appendix G Item (b).

As previously discussed, the City has not adopted VMT thresholds and has not published guidelines for the preparation of transportation studies. Under CEQA, lead agencies have the discretion to choose the most appropriate methodology to evaluate VMT and have discretion to choose their own significance thresholds. OPR provided a Technical Advisory containing guidelines related to VMT analysis methodology, thresholds, and mitigation. In Metropolitan Planning Organization (MPO) counties, OPR recommends that the significance threshold for residential and office projects be based on comparisons of VMT/capita and VMT/employee generated by the project to regional and city-wide average values. Lead agencies are encouraged in Section 15064.7 of the CEQA Guidelines to adopt significance thresholds through a formal adoption process but may also apply thresholds on a case by case basis. Since the City has not officially adopted VMT thresholds and guidelines for the preparation of transportation studies, this analysis relies on guidance from the OPR technical advisory to evaluate CEQA guidelines for VMT.

The OPR recommended thresholds for residential and office land uses as follows:

- Residential: A project exceeding a level of 15% below existing VMT per capita for the city or region may indicate a significant transportation impact.
- Office: A project exceeding a level of 15% below existing regional VMT per employee may indicate a significant transportation impact.

For typical land development projects, such as residential, office, and commercial spaces, the VMT comparison is normally relative to the existing year (e.g., 2023). Since the General Plan is anticipated to take multiple years to be implemented and developed, it is more appropriate to calculate the project-generated VMT under the long-term 2045 horizon year (which would be consistent with the anticipated implementation of the General Plan). Based on this approach, if the VMT per capita or VMT per employee is lower in the horizon year with the Plan than the respective metrics under existing conditions, the Plan would have a less than significant impact on VMT. In summary, the following VMT thresholds apply as project impacts:

- The general plan's residential generated VMT under horizon conditions would be compared to 15% below the baseline region-wide VMT/capita average to determine impact significance.
- The general plan's office generated VMT under horizon conditions would be compared to 15% below the baseline region-wide VMT/employee average to determine impact significance.

A cumulative impact consists of an impact which is created as a result of the combination of the Project with other projects causing related impacts. A plan/project has cumulatively considerable environmental effects (i.e., is significant) when the incremental effects of the plan/project are significant when viewed in connection with the effects of other projects, including probable future projects. According to OPR's TA, a project that falls below an efficiency-based threshold (such as VMT per capita or VMT per employee) that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact. A significant cumulative impact may also occur if the project is not consistent with the RTP/SCS. In summary, a significant cumulative VMT impact would occur if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the RTP/SCS.

Increase Hazards Because of a Geometric Design Feature

The following threshold is used to evaluate impacts for CEQA Appendix G item (c).

Any project that causes a substantial increase in on-street hazards due to geometric design will potentially result in a significant impact. Generally, a plan/project causes a significant impact related to hazards if the

area plan creates an unsafe geometric design feature in the transportation system. The evaluation of hazards shall consider if:

- The Project creates a change in the transportation system which introduces an unsafe design feature.

Inadequate Emergency Access

The following threshold is used to evaluate impacts for CEQA Appendix G item (d).

Generally, a project causes a significant impact to emergency access if it creates an area with inadequate emergency access. The evaluation of emergency access shall consider if:

- The Project creates a change in land uses or the transportation system which result in inadequate emergency access to one or more areas.

CEQA ANALYSIS METHODOLOGY

Because SB 743 eliminated the use of LOS for CEQA impact analysis purposes, road capacity analysis is not included in this TIA. Under CEQA, the primary quantitative measure to evaluate transportation impacts is VMT. This transportation analysis provides an analysis of potential transportation impacts under current CEQA criteria. A local transportation analysis is being prepared separately to evaluate effects associated with implementation of the Project in terms of roadway capacity and LOS.

TRAVEL DEMAND MODEL

This study assesses the VMT characteristics of the adopted General Plan and the proposed General Plan (Project) conditions in the 2045 planning horizon year to identify if the Project would result in VMT impacts. The applicable VMT significant impact thresholds are described above. Existing (2023) VMT and future VMT were estimated using the Southern California Association of Governments (SCAG) travel demand model. Calculations for the VMT for the Project was determined for the transportation analysis zones (TAZs) that most closely represent the study area including the City limits and sphere of influence.

The SCAG regional travel model evaluates travel throughout the five-county SCAG region and uses the TransCAD software. The model groups land uses in the region into TAZs, and then uses a series of calculation steps to estimate travel associated with the land uses and transportation network.

- **Trip Generation:** How many daily trips by trip purpose are generated by each land use in each TAZ.
- **Trip Distribution:** How many trips of each type travel to each other TAZ.
- **Mode Choice:** Which travel modes are used by people of different demographic categories for trips of different purposes between each origin and destination, including auto, transit, bicycle and walk modes.
- **Time of Day:** Which trips are made during peak hours versus off-peak hours.
- **Trip Assignment:** Which routes are used by each vehicle trip or transit trip.

The daily activity patterns in the travel model are based on a statistical analysis of a household travel survey, where a representative sample of households were asked to track all daily activities and trips by all members of their household. The travel model was calibrated to these surveyed travel patterns, and also validated by its ability to replicate counted traffic volumes, transit ridership, and total VMT from traffic count sources.

The version of the SCAG model that has been used for VMT analysis in most communities in the SCAG region has a base year of 2012 and a forecast year of 2040.

Modelled Scenarios

The following scenarios were reviewed and developed to provide VMT and roadway segment forecasts:

- **2023 Existing Conditions:** corresponds to an interpolation between the SCAG model 2012 base year and the 2045 forecast conditions.
- **2045 No Project:** corresponds to 2045 horizon year conditions under the existing (currently adopted) General Plan. It consists of the adopted general plan network and land use, and assumes allowable land use buildout with current zoning. Outside of the Lawndale planning area, the forecasts use the 2040 SCAG RTP land use forecast.
- **2045 Project:** corresponds to 2045 conditions with maximum development potential with the General Plan Update, including the Hawthorne Boulevard Specific Plan. Outside of the Lawndale planning area, the forecasts use the 2040 SCAG RTP land use forecast.

Land Use

The SCAG travel model requires land uses to be defined for each geographic area in the county. The model defines land uses in TAZs which are typically bounded by major arterial or collector streets and are generally subdivisions of Census tracts. The model land use inputs include numbers of households and employees by employment category, as well as enrollment at schools.

The SCAG model had defined a 2040 land use forecast based on the SCAG Regional Transportation Plan. This forecast was generally consistent with the allowable land uses currently in the City and sphere of influence, but did not fully account for the proposed land uses in the planning area. To assess the transportation impacts of the Project more completely, a revised future 2045 land use forecast was prepared for this TIA.

A detailed mapping of parcels and allowable development was compiled to determine the maximum buildout potential of each parcel and planning area with both the City's currently adopted General Plan (for No Project conditions) and the proposed General Plan land use map (for Project conditions).

Table 5 and Table 6 indicate key assumptions used to calculate model land use inputs. Table 7 summarizes the housing and employment totals in the SCAG model for 2023 and 2045.

Table 5: Existing General Plan Non-Residential Land Use Assumptions

Land Use Designation	FAR[1]	Square Feet per Employee
Commercial	0.5	500
Downtown Commercial	0.5	500
Industrial	0.5	750
Public Facilities/Schools	0.2	1,000

Source: De Novo Planning Group, 2023.

[1] FAR = floor area ratio; ratio of building square footage to land area square footage

Table 6: Proposed General Plan Non-Residential Land Use Assumptions

Land Use Designation	FAR[1]	Square Feet per Employee
Commercial	0.5	500
Hawthorne Boulevard Specific Plan	0.6	500
Industrial	0.5	750
Public Facilities	0.15	1,000

Source: De Novo Planning Group, 2023.

[1] FAR = floor area ratio; ratio of building square footage to land area square footage

Table 7: SCAG Model Land Use Inputs for Lawndale Planning Area TAZs[1]

Housing and Employees	2023 Existing Conditions	2045 No Project	2045 Project
HOUSING UNITS			
Single family	7,201	8,184	7,340
Multi family	4,262	5,203	8,065
Total	**11,463**	**13,387**	**15,405**
EMPLOYEES			
Retail	n/a	2,159	2,448
Non-Retail	n/a	6,919	7,121
Total	**6,470**	**9,078**	**9,569**

Source: De Novo Planning Group, 2023.

[1] Project was represented in existing SCAG model TAZs, The SCAG model TAZ boundaries in the Project Area include some area and land uses outside the Project Area boundary, so totals may not be identical to the Project Description.

Compared to 2023 existing conditions, the adopted General Plan would allow for a 17 percent increase in housing and a 40 percent increase in employment. Compared to the adopted Genera Plan, the Project would increase housing by 2,018 units (15 percent increase) and employment by 491 (5 percent increase).

Transportation Networks

The travel model contains representations of transportation networks for all travel modes, as described below.

- The model road network includes all freeways, highways, arterial streets, most collector streets which provide connectivity between neighborhoods, and selected local streets. The roads are coded with information on functional classification, number of through lanes, speed and capacity.
- All regular weekday transit routes are coded in the model. Bus routes are assumed to run on the streets and be subject to varying congested conditions on those streets. Rail transit operates on separate facilities and is not affected by road congestion. The model also has a general representation of transit stop locations and park-and-ride access. The model assumes the C-Line alignment at street level along the railroad right of way east of Condon Avenue.
- Bicycles and pedestrians are assumed to have access to all streets except freeways.

Future Travel Trends

The model presumes that future background travel options and behaviors remain similar to current conditions and does not explicitly account for potential changes associated with disruptive trends, emerging technologies, and changes in travel preferences. As a result, the travel model is likely to represent a conservative estimate of future amounts of commuting, vehicle use and VMT.

IMPACT ANALYSIS

The following provides an evaluation of the Project's (1) potential conflicts with City's programs, plans, ordinances, and policies, (2) impacts in terms of VMT, (3) potential geometric design hazards, and (4) impacts to emergency vehicle access.

Impact 1: Consistency with Circulation System Programs

SIGNIFICANCE CRITERION A: *Would the proposed plans conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The following reviews consistency with policies and programs related to transit, pedestrian, vehicular, and bicycle travel.

Roadway

No specific development projects are proposed as part of the Lawndale General Plan Update. The update will accommodate future growth in the City, including new businesses, expansion of existing businesses, and new residential uses. New growth is anticipated to occur primarily within the Hawthorne Boulevard Specific Plan area. The Mobility Element would not propose any roadway changes or increases in roadway capacity. Therefore, the proposed Plan would not conflict with roadway policies adopted by the City of Lawndale or adjacent cities for their respective facilities.

Pedestrian and Bicycle Travel

The proposed Mobility Element update references and incorporates the South Bay Bicycle Master Plan and the South Bay Cities COG Local Travel Network, which include bicycling and walking improvements, and facilities that will improve non-motorized accessibility and connectivity throughout the city. The proposed Mobility Element includes new planned bike facilities on several key roadways including but not limited to Hawthorne Boulevard, Inglewood Avenue, Prairie Avenue, Rosecrans Avenue, Manhattan Beach Boulevard, Artesia Boulevard. The Project would also enhance the pedestrian experience by providing a more walkable and denser environment, especially in the HBSP area.

The Project is consistent with the goals and policies of Lawndale's Mobility Element by promoting pedestrian and bicycle safety and Complete Streets improvements which would enhance the safety and attractiveness of bicycle and pedestrian travel. For instance, Goal 3 (Complete Streets) directs the City to apply complete streets principles to all transportation improvements projects, to wherever feasible provide multimodal connectivity, and promote walking and bicycling to local schools. Goal 6 (Active Transportation) includes several policies to promote a comprehensive network of pedestrian and bicycle facilities.

Transit

The proposed Mobility Element update includes transit policies in Goal 5 (Transit) that supports programs encouraging public transit, that require new developments to construct transit facilities when appropriate, and work with Metro to meet the needs of transit commuters to and from Lawndale. The Project would not conflict with transit policies adopted by the City of Lawndale or transit services from other agencies for their respective facilities.

Conclusion

In summary, a review of the Project's land use and circulation characteristics revealed no potential policy inconsistencies or conflicts with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or the performance or safety of those facilities. Additionally, the City has numerous policies

supporting complete streets and to promote use of transit and active transportation. Therefore, with respect to conflicts with circulation system policies, the impact of the Project would be less than significant.

Impact 2: Vehicle Miles of Travel

SIGNIFICANCE CRITERION B: *Would the proposed plans conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The proposed plans were assessed for VMT to comply with SB 743 requirements and CEQA Guideline section 15064.3, subdivision (b).

Applicable Thresholds

As previously discussed, the VMT significant impact thresholds are:

- Project Threshold: a significant impact would occur if the project's 2045 VMT per capita or VMT per employee exceeds 15 percent below the existing Los Angeles countywide average VMT per capita, or VMT per employee, respectively.
- Cumulative Threshold: a significant cumulative VMT impact would occur if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the RTP/SCS.

VMT Project Impact Assessment

The VMT statistics were calculated for the two scenarios mentioned prior, encompassing the Project Area limits. Table 8 summarizes the VMT results for the 2023 existing conditions, the applicable thresholds to evaluate potential project impacts, and the future two VMT scenarios.

Future conditions with the Project would result in decreased VMT per employee and VMT per capita in comparison to existing conditions. Compared to 2045 No Project (adopted General Plan) conditions there would be an increase in VMT per capita, and a decrease in VMT per employee. In summary:

- The VMT per capita with the Project would be 8 percent lower than existing conditions.
- The VMT per employee with the Project would be 7 percent lower than existing conditions.
- The VMT per capita with the Project would be 4 percent higher than 2045 No Project conditions.
- The VMT per employee with the Project would be 2 percent lower than 2045 No Project conditions.
- The impact thresholds would not be exceeded for the Project.

The reductions from the base year to the future year indicate that future development, in particular planned mixed-use development, will provide more opportunities for Lawndale residents and employees to access jobs and services within shorter distances. The shorter trip distances reduce VMT by vehicles, and also increase the likelihood that trips will be made by non-auto modes such as bicycling and walking. Improved transit service and accessibility to transit also help to reduce VMT even as travel activity increases.

Implementation of the Project would result in reductions in VMT per capita and VMT per employee compared to 2023 existing conditions. The impact thresholds would not be exceeded. Therefore, with respect to consistency with CEQA Guidelines Section 15064.3, subdivision (b), the impact of the Project would be less than significant and no mitigaiton would be required.

Table 8: VMT Generated by Land Uses within the Project Area and Region

Units	Los Angeles County 2023 Existing Conditions	Lawndale 2023 Existing Conditions	Lawndale 2045 No Project	Lawndale 2045 Project
VMT per Capita				
Population	10,546,441	38,313	38,686	47,462
Residential VMT	135,033,355	378,185	342,969	436,225
VMT Per Capita	12.81	9.87	8.87	9.19
Impact Threshold[1]	N/A	N/A	N/A	10.89
EXCEEDS THRESHOLD	N/A	N/A	N/A	NO
VMT per Employee				
Employees	4,627,299	9,408	10,489	10,979
Employee VMT	83,880,257	152,996	157,821	162,293
VMT Per Employee	18.13	16.26	15.05	14.78
Impact Threshold[1]	N/A	N/A	N/A	15.41
EXCEEDS THRESHOLD	N/A	N/A	N/A	NO
Total Regional VMT				
Los Angeles County	339,797,977	-	358,489,475	358,820,209

Source: Kittelson and Associates, 2023.
Notes: [1] Thresholds are 15% below the VMT per capita and VMT per employee for the Los Angeles County Region under baseline conditions.
N/A = not applicable.

VMT Cumulative Impact Assessment

As discussed previously, a significant transportation cumulative impact would occur if the Project threshold is exceeded, or if the Project is determined to be inconsistent with the RTP/SCS . As noted above, the project impacts in VMT would be less than significant, as the Project's VMT per capita and VMT per employee would not exceed applicable thresholds. In addition, the Project is consistent with the SCAG RTP/SCS. Besides helping increase the local and regional housing supply to meet regional housing needs and locating housing in a transit-rich area, the Project helps further the following RTP/SCS goals:

- Encourage regional economic prosperity and global competitiveness.
- Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Enhance the preservation, security, and resilience of the regional transportation system.
- Reduce greenhouse gas emissions and improve air quality.
- Support healthy and equitable communities.
- Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Encourage development of diverse housing types in areas that are supported by multiple transportation options.

The Project does not exceed the Project VMT threshold and is not inconsistent with the RTP/SCS. Therefore, cumulative impacts would be less than significant and no mitigaiton would be required.

Impact 3: Roadway Safety Design Hazards

SIGNIFICANCE CRITERION C: *Would the proposed plans substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

Buildout of the Project would involve the alteration, intensification, and redistribution of land uses. Hazards are typically assessed at the individual project level when an actual design and construction of a circulation facility is proposed. Potential impacts associated with future land use development projects would be analyzed and evaluated in detail through the city review process for those individual projects. The city's design and construction standards and specifications provide for coordinated and standardized development of city facilities, including roadways. The standards apply to, regulate, and guide the design and preparation of plans, and the construction of streets, highways, alleys, drainage, traffic signals, site access, and related public improvements. As individual projects would undergo review by Public Works and Planning departments for approval and construction and would have to meet design guidelines, potential safety design hazards associated with land development projects would be addressed and result in less than significant impacts.

Prior to implementation, any improvements would be subject to a detailed review and future consideration by the City's Public Works engineering staff and other relevant City agencies. An evaluation of the roadway alignments, intersection geometrics, and traffic control features would be needed at the project design level. Roadway improvements would have to be made in accordance with the City's circulation plan and roadway design guidelines and meet design guidelines in the California Manual of Uniform Traffic Control Devices and the Caltrans Roadway Design Manual. In addition, the City of Lawndale Mobility Element includes goals, policies, and actions to improve the safety of all users of the transportation system in the City such as Goal 1 (Local Circulation System), "Development-Related Traffic Impacts" policy, which requires new development to provide appropriate and feasible improvements as condition of approval so they do not adversely affect traffic flow and roadway operations.

Overall, implementation of the General Plan would not result in hazardous conditions. As individual projects and circulation improvements would undergo review by Public Works and Planning departments for approval and construction and would have to meet design guidelines, impacts would be less than significant.

Impact 4: Emergency Vehicle Access

SIGNIFICANCE CRITERION D: *Would the proposed plans result in inadequate emergency access?*

Emergency access associated with future land use development projects would be analyzed and evaluated in detail through the city review process for those individual projects. The city's emergency access standards would apply to all developments proposed under the proposed Project. Therefore, with respect to inadequate emergency access, the impact of the proposed plans would be less than significant.

ROADWAY VOLUMES FORECAST

Traffic volumes on major roads are provided to inform other technical studies required under CEQA, such as noise analyses. The traffic volumes for existing, and forecasts for 2045 cumulative conditions under the existing General Plan and theGeneral Plan Updateare based on the SCAG Travel Demand Model. Traffic forecasts for specific segments were based on an incremental adjustment methodology to minimize the effects of differences between the travel model and observed traffic counts. For each segment, the increment was calculated between the model's 2023 base year and the model's 2045 forecast for each study roadway (link) volume. Additional calculation was done to find the growth increment to 2045. This growth increment was then added to the observed traffic count to create the adjusted traffic volume forecasts (Table 9).

Table 9: Existing and Future Roadway Segment Daily Traffic Volumes

#	Segment	Existing[1]	2045 No Project	2045 Project
1	Inglewood Ave between Marine Ave & 153rd Pl	30,382	29,900	30,400
2	Inglewood Ave between I-405 S Entrance & Manhattan Beach Blvd	46,980	47,100	47,200
3	Inglewood Ave between Manhattan Blvd & Artesia Blvd	34,669	33,600	33,800
4	Manhattan Beach Blvd between Inglewood Ave & Hawthorne Blvd	23,463	27,400	27,500
5	Artesia Blvd between Inglewood Ave & Grevillea Ave	33,333	33,500	33,500
6	Hawthorne Blvd between Marine Ave & Manhattan Beach Blvd	36,715	34,600	35,900
7	Hawthorne Blvd between Manhattan Beach Blvd & 160th St	39,254	39,000	40,300
8	Hawthorne Blvd between 162nd St & 166th St	44,037	43,200	44,900
9	Hawthorne Blvd between 169th St & Redondo Beach Blvd	40,769	40,200	40,300
10	Rosecrans Ave between Hawthorne Blvd & Prairie Ave	32,747	36,400	36,300
11	Redondo Beach Blvd between Hawthorne Blvd & Prairie Ave	18,912	22,300	22,300
12	Manhattan Beach Blvd between Freeman Ave & Prairie Ave	19,794	23,800	24,100
13	Prairie Ave between Marine Ave & Manhattan Beach Blvd	25,223	28,300	28,900
14	Manhattan Beach Blvd between Prairie Ave & Crenshaw Blvd	21,543	23,600	24,000
15	Crenshaw Blvd between Marine Ave & Manhattan Beach Blvd	27,196	32,900	33,200

Source: Kittelson and Associates, 2023.

[1] 24-hour directional counts were taken on March 9, 2023

Appendix A:
Detailed VMT Impact Summary

LAWNDALE GP VMT SUMMARY

v2 June 26, 2023

	2012 Base Year	2023 Interpolated	2040 No Project	2040 With Project	2045 No Project	2045 With Project
SCAG Region						
Demographics						
Population	18,317,584	19,816,156	22,132,131	22,140,907		
Households	5,883,352	6,483,783	7,411,723	7,413,740		
Employment	7,425,052	8,375,476	9,844,314	9,844,804		
Daily Vehicle Trips						
Auto	76,744,282	81,541,637	88,955,730	88,979,456		
Truck	2,097,093	2,409,550	2,892,437	2,892,581		
Total	78,841,376	83,951,186	91,848,167	91,872,036		
Truck Percent	2.7%	2.9%	3.1%	3.1%		
Daily VMT by Purpose						
Home Based	267,793,262	281,203,213	301,927,682	302,048,160		
VMT/Capita	14.62	14.19	13.64	13.64		
Employee Based	149,652,640	157,046,768	168,474,056	168,604,327		
VMT/Employee	20.16	18.75	17.11	17.13		
Total Daily VMT						
Auto						
Truck						
Total	655,290,194	688,004,357	738,562,609	738,852,673		
Truck Percent						
VMT/Service Population	25.46	24.40	23.10	23.10		
Los Angeles County						
Demographics						
Population	9,918,214	10,542,993	11,508,560	11,517,336		
Households	3,255,425	3,526,628	3,945,761	3,947,778		
Employment	4,242,577	4,627,299	5,221,869	5,222,359		
Daily Vehicle Trips						
Auto	40,598,204	41,864,478	43,821,448	43,847,745		
Truck	1,192,970	1,333,870	1,551,626	1,551,770		
Total	41,791,173	43,198,349	45,373,074	45,399,515		
Truck Percent	2.9%	3.1%	3.4%	3.4%		
Daily VMT by Purpose						
Home Based	130,625,977	135,033,355	141,844,756	141,946,964		
VMT/Capita	13.17	12.81	12.33	12.32		
Employee Based	82,706,937	83,880,257	85,693,571	85,823,580		
VMT/Employee	19.49	18.13	16.41	16.43		
Total Daily VMT						
Auto						
Truck						
Total	339,797,977	**347,270,997**	**358,489,475**	**358,820,209**		
Truck Percent						
VMT/Service Population	24.00	22.89	21.43	21.44		
Lawndale						
Demographics						
Population	38,072	38,313	38,686	47,462	38,686	47,462
Households	11,295	12,122	13,399	15,416	13,399	15,416
Employment	8,708	9,408	10,489	10,979	10,489	10,979
Daily Vehicle Trips						
Auto	123,950	127,988	134,230	152,753	134,230	152,753
Truck	1,715	1,874	2,121	2,266	2,121	2,266
Total	125,664	129,863	136,351	155,019	136,351	155,019
Truck Percent	1.4%	1.4%	1.6%	1.5%	1.6%	1.5%
Daily VMT by Purpose						
Home Based	400,971	378,185	342,969	436,225	342,969	436,225
VMT/Capita	10.53	**9.87**	8.87	9.19	**8.87**	**9.19**
Employee Based	149,874	152,996	157,821	162,293	157,821	162,293
VMT/Employee	17.21	**16.26**	15.05	14.78	**15.05**	**14.78**
Total Daily VMT						
Auto						
Truck						
Total	885,378	893,513	906,084	1,026,827	906,084	1,026,827
Truck Percent						
VMT/Service Population	18.93	18.72	18.43	17.57	18.43	17.57

Appendix G: Tribal Consultation Communications

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 17, 2021

Amanda Tropiano
City of Lawndale

Via Email to: atropiano@denovoplanning.com

Re: Native American Consultation, Pursuant to Senate Bill 18, Government Code §65352.3 and §65352.4, Lawndale Comprehensive General Plan Update and Hawthorne Blvd SP Update Project, Los Angeles County

Dear Ms. Tropiano:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties.

Government Code §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

The law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

The NAHC also believes that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

    - A listing of any and all known cultural resources that have already been recorded or are adjacent to the APE, such as known archaeological sites;
    - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
    - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
    - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code §6254.10.

3. The result of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission. The request form can be found at http://nahc.ca.gov/wp-content/uploads/2015/08/Local-Government-Tribal-Consultation-List-Request-Form-Update.pdf.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
Los Angeles County
5/17/2021

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231 — Gabrielino
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490 — Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street — Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 — Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

Soboba Band of Luiseno Indians
Isaiah Vivanco, Chairperson
P. O. Box 487 — Cahuilla, Luiseno
San Jacinto, CA, 92581
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 6097.98 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Government Code Sections 65352.3 and 65352.4 et seq for the proposed Lawndale Comprehensive General Plan Update and Hawthorne Blvd SP Update Project, Los Angeles County.

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

Gabrieleno Band of Mission
Indians-Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA 91723

RE: CITY OF LAWNDALE GENERAL PLAN AND HAWTHORNE BOULEVARD SPECIFIC PLAN COMPREHENSIVE UPDATE 2020. SB 18 TRIBAL CONSULTATION.

To whom it may concern:

This letter formally invites you to request consultation pursuant to Senate Bill 18 ("SB18, Government Code Section 65352.3) regarding the above referenced project. As you may know, SB18 became effective on March 1, 2005 and requires local governments to consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places and sacred sites. The above referenced project is subject to the requirements of SB18. The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

City of Lawndale is committed to fulfilling SB18's goals and believes that tribal participation in the planning process is crucial for the success of the proposed project. The City of Lawndale Community Development Department contacted the Native American Heritage Commission (NAHC) to request the list of tribes who should be contacted regarding the proposed project. The NAHC included your tribe on the list.

The intent of consultation is to provide an opportunity for local governments and interested tribes to work together in the project planning early in the process toward the protection of tribal cultural places that might not appear on cultural resource registries. This is your opportunity to participate in the process for this project.

A Request for Consultation for the project must be made within 90 days of the date of this notice. Under SB18, if your tribe requests to participate in the consultation process, any sensitive information shared with the County regarding cultural places and/or sacred sites will be kept strictly confidential and will not be divulged to the public.

If your tribe would like to consult under SB18 regarding the proposed project, please contact Sean M. Moore, at the City of Lawndale in writing, by email at JChavez@lawndalecity.org, at the address listed on the letterhead or by phone at (310) 973-3206 on or before October 14, 2021.

If you have any questions or need additional information regarding this matter please contact our office.

Sincerely;

_____

Jared Chavez, Senior Planner
Community Development Department

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

Gabrielino-Tongva Tribe
Charles Alvarez,
23454 Vanowen Street
West Hills, CA, 91307

RE: CITY OF LAWNDALE GENERAL PLAN AND HAWTHORNE BOULEVARD SPECIFIC PLAN COMPREHENSIVE UPDATE 2020. SB 18 TRIBAL CONSULTATION.

To whom it may concern:

This letter formally invites you to request consultation pursuant to Senate Bill 18 ("SB18, Government Code Section 65352.3) regarding the above referenced project. As you may know, SB18 became effective on March 1, 2005 and requires local governments to consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places and sacred sites. The above referenced project is subject to the requirements of SB18. The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

City of Lawndale is committed to fulfilling SB18's goals and believes that tribal participation in the planning process is crucial for the success of the proposed project. The City of Lawndale Community Development Department contacted the Native American Heritage Commission (NAHC) to request the list of tribes who should be contacted regarding the proposed project. The NAHC included your tribe on the list.

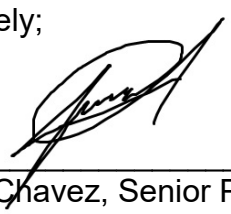
The intent of consultation is to provide an opportunity for local governments and interested tribes to work together in the project planning early in the process toward the protection of tribal cultural places that might not appear on cultural resource registries. This is your opportunity to participate in the process for this project.

A Request for Consultation for the project must be made within 90 days of the date of this notice. Under SB18, if your tribe requests to participate in the consultation process, any sensitive information shared with the County regarding cultural places and/or sacred sites will be kept strictly confidential and will not be divulged to the public.

If your tribe would like to consult under SB18 regarding the proposed project, please contact Sean M. Moore, at the City of Lawndale in writing, by email at JChavez@lawndalecity.org, at the address listed on the letterhead or by phone at (310) 973-3206 on or before October 14, 2021.

If you have any questions or need additional information regarding this matter please contact our office.

Sincerely;



Jared Chavez, Senior Planner
Community Development Department

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St. #231
Los Angeles, CA, 90012

RE: CITY OF LAWNDALE GENERAL PLAN AND HAWTHORNE BOULEVARD SPECIFIC PLAN COMPREHENSIVE UPDATE 2020. SB 18 TRIBAL CONSULTATION.

To whom it may concern:

This letter formally invites you to request consultation pursuant to Senate Bill 18 ("SB18, Government Code Section 65352.3) regarding the above referenced project. As you may know, SB18 became effective on March 1, 2005 and requires local governments to consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places and sacred sites. The above referenced project is subject to the requirements of SB18. The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

City of Lawndale is committed to fulfilling SB18's goals and believes that tribal participation in the planning process is crucial for the success of the proposed project. The City of Lawndale Community Development Department contacted the Native American Heritage Commission (NAHC) to request the list of tribes who should be contacted regarding the proposed project. The NAHC included your tribe on the list.

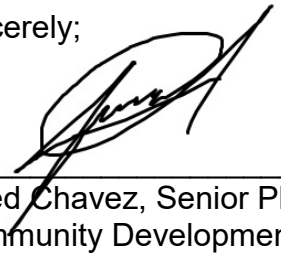
The intent of consultation is to provide an opportunity for local governments and interested tribes to work together in the project planning early in the process toward the protection of tribal cultural places that might not appear on cultural resource registries. This is your opportunity to participate in the process for this project.

A Request for Consultation for the project must be made within 90 days of the date of this notice. Under SB18, if your tribe requests to participate in the consultation process, any sensitive information shared with the County regarding cultural places and/or sacred sites will be kept strictly confidential and will not be divulged to the public.

If your tribe would like to consult under SB18 regarding the proposed project, please contact Sean M. Moore, at the City of Lawndale in writing, by email at JChavez@lawndalecity.org, at the address listed on the letterhead or by phone at (310) 973-3206 on or before October 14, 2021.

If you have any questions or need additional information regarding this matter please contact our office.

Sincerely;



_____

Jared Chavez, Senior Planner
Community Development Department

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

Gabrielino/Tongva San Gabriel
Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA 91778

RE: CITY OF LAWNDALE GENERAL PLAN AND HAWTHORNE BOULEVARD SPECIFIC PLAN COMPREHENSIVE UPDATE 2020. SB 18 TRIBAL CONSULTATION.

To whom it may concern:

This letter formally invites you to request consultation pursuant to Senate Bill 18 ("SB18, Government Code Section 65352.3) regarding the above referenced project. As you may know, SB18 became effective on March 1, 2005 and requires local governments to consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places and sacred sites. The above referenced project is subject to the requirements of SB18. The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

City of Lawndale is committed to fulfilling SB18's goals and believes that tribal participation in the planning process is crucial for the success of the proposed project. The City of Lawndale Community Development Department contacted the Native American Heritage Commission (NAHC) to request the list of tribes who should be contacted regarding the proposed project. The NAHC included your tribe on the list.

The intent of consultation is to provide an opportunity for local governments and interested tribes to work together in the project planning early in the process toward the protection of tribal cultural places that might not appear on cultural resource registries. This is your opportunity to participate in the process for this project.

A Request for Consultation for the project must be made within 90 days of the date of this notice. Under SB18, if your tribe requests to participate in the consultation process, any sensitive information shared with the County regarding cultural places and/or sacred sites will be kept strictly confidential and will not be divulged to the public.

If your tribe would like to consult under SB18 regarding the proposed project, please contact Sean M. Moore, at the City of Lawndale in writing, by email at JChavez@lawndalecity.org, at the address listed on the letterhead or by phone at (310) 973-3206 on or before October 14, 2021.

If you have any questions or need additional information regarding this matter please contact our office.

Sincerely;

_____

Jared Chavez, Senior Planner
Community Development Department

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

Gabrielino Tongva Indians
of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490
Bellflower, CA, 90707

RE: CITY OF LAWNDALE GENERAL PLAN AND HAWTHORNE BOULEVARD SPECIFIC PLAN COMPREHENSIVE UPDATE 2020. SB 18 TRIBAL CONSULTATION.

To whom it may concern:

This letter formally invites you to request consultation pursuant to Senate Bill 18 ("SB18, Government Code Section 65352.3) regarding the above referenced project. As you may know, SB18 became effective on March 1, 2005 and requires local governments to consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places and sacred sites. The above referenced project is subject to the requirements of SB18. The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

City of Lawndale is committed to fulfilling SB18's goals and believes that tribal participation in the planning process is crucial for the success of the proposed project. The City of Lawndale Community Development Department contacted the Native American Heritage Commission (NAHC) to request the list of tribes who should be contacted regarding the proposed project. The NAHC included your tribe on the list.

The intent of consultation is to provide an opportunity for local governments and interested tribes to work together in the project planning early in the process toward the protection of tribal cultural places that might not appear on cultural resource registries. This is your opportunity to participate in the process for this project.

A Request for Consultation for the project must be made within 90 days of the date of this notice. Under SB18, if your tribe requests to participate in the consultation process, any sensitive information shared with the County regarding cultural places and/or sacred sites will be kept strictly confidential and will not be divulged to the public.

If your tribe would like to consult under SB18 regarding the proposed project, please contact Sean M. Moore, at the City of Lawndale in writing, by email at JChavez@lawndalecity.org, at the address listed on the letterhead or by phone at (310) 973-3206 on or before October 14, 2021.

If you have any questions or need additional information regarding this matter please contact our office.

Sincerely;

Jared Chavez, Associate Planner
Community Development Department

14717 BURIN AVENUE ● LAWNDALE, CALIFORNIA 90260 ● (310) 973-3230

July 14, 2021

FROM: City of Lawndale – Community Development Department, Jared Chavez, Senior Planner

RE: AB 52 CONSULTATION CEQA Section 21080.3

TO: Grabrieleño Band of Mission Indians- Kizh Nation – Andre Salas, Chairman

Dear Mr. Salas,

This letter is in response to the AB52 letter received from the Gabrieleno Band of Mission Indians.

The City of Lawndale has decided to undertake the following project: The City of Lawndale, is proposing a comprehensive update the City's General Plan (including the Housing Element) and the Hawthorne Boulevard Specific Plan.

If you would like more information on the project you can log in our website www.lawndale.generalplan.org. You may also contact Jared Chavez by email at jchavez@lawndalecity.org or by phone at (310) 973-3206.

Back to Agenda

CITY OF LAWNDALE

14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Sean M. Moore, City Manager

PREPARED BY: Lea Reis, Director of Public Works/City Engineer
Hrant Manuelian, Director of Finance
Nick Petrevski, Associate Engineer

SUBJECT: **Award One-Year On-Call Traffic Engineering Services Contract**

BACKGROUND

The City has various traffic requests from the general public and Sheriff Department that require the expertise services of a traffic engineer to review and provide recommendations. It was decided that an on-call traffic engineering services list would provide the most efficient way to address these requests as they come in. The alternative would be to create an RFP for each request, which would be time-consuming and redundant. When needed, three quotes will be obtained from the on-call list, and the best price will be negotiated so each qualified firm has a chance to work on city traffic requests.

STAFF REVIEW

On March 2, 2023 staff issued a Request for Qualifications (RFQ) and received eleven responses. Vendor selection was based on many factors including responsiveness and completeness, qualifications and experience, issues, and challenges, understanding and approach, and reference checks. Based on the review, staff selected three firms to be interviewed. They are W.G. Zimmerman Engineering, Inc., Advantec Consulting Engineers, Inc., and Transtech Engineers, Inc.

On May 23, 2023, a sub-committee consisting of staff from Community Services, Municipal Services, and Public Works Department interviewed the top three scoring firms. All vendors were technically qualified to provide traffic engineering services and have experience working with other public agencies such as Norwalk, Commerce, Downey, Signal Hill, Seal Beach and Long Beach. Based on the interviews, staff recommends W.G. Zimmerman Engineering, Inc., Advantec Consulting Engineers, Inc., and Transtech Engineers, Inc. for the one-year On-Call Traffic Engineering Services contracts.

LEGAL REVIEW

The contract was approved as to form by the City Attorney.

FISCAL IMPACT

The current FY 2023-24 budget includes funding from account number 201-310-700.296 in the amount of $80,000 for On-Call Traffic services. Billing rate schedules for all three firms can be found in the attachments.

No budget amendment is needed as there is already $80,000 budgeted for this in Prop C Fund 207.

RECOMMENDATION

Staff recommends that the City Council award an On-Call Traffic Engineering Services agreement to W.G. Zimmerman Engineering, Inc., Advantec Consulting Engineers, Inc., and Transtech Engineers, Inc. for a term of one-year, with an option to extend up to four one-year extensions.

ATTACHMENT

1. Contract Services Agreement and Billing Rates for W.G. Zimmerman Engineering, Inc.
2. Contract Services Agreement and Billing Rates for Advantec Consulting Engineers, Inc.
3. Contract Services Agreement and Billing Rates for Transtech Engineers, Inc.

5 – COST PROPOSAL

W.G. Zimmerman Engineering, Inc.

City of Lawndale Billing Rate Schedule

Classification	Rate
Project Manager/Traffic Engineer (Registered)	$ 190.00/Hr
Senior Project Engineer (Registered)	$ 180.00/Hr
Project Engineer	$ 130.00/Hr
Senior Design Engineer	$ 125.00/Hr
Design Engineer	$ 120.00/Hr
Administration/Office Support	$ 90.00/Hr

Non-Labor Expenses	
Printing	Cost plus 5%
Reproduction (Blue lines)	Cost plus 5%
Other Expenses (such as sub-consultants, outside services or special equipment needs)	Cost plus 5%

SECTION 5: FEE PROPOSAL

5.1 RATE SCHEDULE

The following summarizes ADVANTEC hour rates and direct costs that will be for tasks and projects to provide On-Call Traffic Services. These services are effective January 2023.

Hourly Rates
Effective January 2023

Classification	Rate
Project Director	$350 / hour
Senior Project Manager VIII	$290 / hour
Senior Project Manager VII	$250 / hour
Project Manager/ Senior Engineer VI	$220 / hour
Project Manager/ Engineer V-3	$195 / hour
Project Manager/ Engineer V-2	$175 / hour
Project Manager/ Engineer V-1	$155 / hour
Associate Engineer IV	$140 / hour
Associate Engineer III	$130 / hour
Assistant Engineer II	$120 / hour
Assistant Engineer I	$110 / hour
Administrative III	$130 / hour
Administrative II	$110 / hour
Administrative I	$ 90 / hour

TRANSTECH ENGINEERS, INC.
SCHEDULE OF HOURLY RATES
Effective through June 30, 2023
Rates are average ranges, negotiable and can be adjusted to establish a fee for each assignment based on the specific project's scope, when such projects are identified by the City.

ENGINEERING			
Field Technician	$80	-	$90
Engineering Technician	$90	-	$100
Assistant CAD Drafter	$100	-	$115
Senior CAD Drafter	$115	-	$130
Associate Designer	$130	-	$145
Senior Designer	$145	-	$160
Design Project Manager	$180	-	$190
Assistant Engineer	$110	-	$120
Associate / Staff Engineer	$135	-	$150
Senior Civil Engineer	$190	-	$210
Traffic Analyst Technician	$95	-	$105
Associate Traffic Analyst	$140	-	$150
Senior Traffic Analyst	$150	-	$160
Professional Transportation Planner	$160	-	$175
Traffic Engineer Technician	$90	-	$100
Associate/Staff Traffic Engineer	$135	-	$150
Traffic Engineer	$160	-	$175
Senior Traffic Engineer	$175	-	$195
Project Manager	$175	-	$195
Senior Project Manager	$195	-	$215
Deputy City Engineer	$160	-	$180
City Engineer	$180	-	$195
Principal Engineer	$195	-	$215
BUILDING & SAFETY			
Permit Technician	$70	-	$80
Plan Check Technician/Analyst	$100	-	$120
Building Inspector	$120	-	$125
Senior Inspector	$125	-	$135
Plans Examiner/Checker	$135	-	$150
Plan Check Engineer	$150	-	$160
Deputy Building Official	$150	-	$160
Building Official	$160	-	$170

CONSTRUCTION MANAGEMENT			
Labor Compliance Analyst	$140	-	$145
Funds Coordinator	$145	-	$155
Office Engineer	$140	-	$150
Construction Inspector	$135	-	$145
Senior Construction Inspector	$145	-	$155
Construction Manager	$155	-	$175
Resident Engineer	$175	-	$190
PUBLIC WORKS INSPECTION			
Public Works Inspector	$135	-	$145
Senior Public Works Inspector	$145	-	$155
Supervising PW Inspector	$155	-	$165
SURVEY AND MAPPING			
Survey Analyst	$140	-	$145
Senior Survey Analyst	$145	-	$150
2-Man Survey Crew	$330	-	$340
Survey & Mapping Specialist	$175	-	$185
Licensed Land Surveyor	$200	-	$210
FUNDING & GRANT WRITING			
Funds Analyst	$140	-	$145
Senior Funds Analyst	$145	-	$155
Grant Writer	$160	-	$170
Funds & Grant Project Manager	$180	–	$190
PLANNING			
Community Development Technician	$75	-	$85
Planning Technician	$85	-	$95
Assistant Planner	$95	-	$115
Associate Planner	$115	-	$135
Senior Planner	$135	-	$160
Planning Manager	$160	-	$180
ADMINISTRATIVE STAFF			
Administrative/Clerical	$65	–	$75
Project Accountant	$75	–	$85

The above fees are increased each year July 1st automatically by the percentage change Los Angeles-Long Beach-Anaheim California Consumer Price Index-All Urban Consumers ("CPI-U") for the preceding twelve-month period as calculated for February by the U.S. Department of Labor Bureau of Labor Statistics and published by the United States Bureau of Labor Statistic.

Attachment 1

CITY OF LAWNDALE

CONTRACT SERVICES AGREEMENT FOR

ON-CALL TRAFFIC ENGINEERING SERVICES

This Contract Services Agreement ("Agreement") is made and entered into this 4th day of December, 2023, by and between the City of Lawndale, a municipal corporation ("City"), and W.G. Zimmerman Engineering, Inc. ("Consultant"). The term Consultant includes professionals performing in a consulting capacity. The parties hereto agree as follows:

1.0 SERVICES OF CONSULTANT

1.1 Scope of Services. In compliance with all terms and conditions of this Agreement, Consultant shall provide the work and services specified in the "Scope of Services" attached hereto as *Exhibit "A"* and incorporated herein by this reference. Consultant warrants that all work or services set forth in the Scope of Services will be performed in a competent, professional and satisfactory manner.

1.2 Consultant's Proposal. The Scope of Services shall include the Consultant's proposal or bid which shall be incorporated herein by this reference as though fully set forth herein. In the event of any inconsistency between the terms of such proposal and this Agreement, the terms of this Agreement shall govern.

1.3 Compliance with Law. All work and services rendered hereunder shall be provided in accordance with all ordinances, resolutions, statutes, rules, and regulations of the City and any Federal, State or local governmental agency having jurisdiction.

1.4 Licenses, Permits, Fees and Assessments. Consultant shall obtain at its sole cost and expense, such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement. Consultant shall have the sole obligation to pay for any fees, assessments, taxes, including applicable penalties and interest, which may be imposed by law and arise from or are necessary for the Consultant's performance of the services required by this Agreement; and shall indemnify, defend and hold harmless City against any claim for such fees, assessments, taxes, penalties or interest levied, assessed or imposed against City hereunder.

1.5 Familiarity with Work. By executing this Agreement, Consultant warrants that Consultant (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the work and services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement.

1.6 Additional Services. City shall have the right at any time during the performance of the services, without invalidating this Agreement, to order extra work beyond that specified in the Scope of Services or make changes by altering, adding to or deducting from said work. No such extra work may be undertaken unless a written order is first given by the Contract Officer to the Consultant, incorporating therein any adjustment in (i) the Contract Sum, and/or (ii) the time to perform this Agreement, which said adjustments are subject to the written approval of the Consultant. Any increase in compensation must be approved by the City Council. It is expressly understood by Consultant that the provisions of this Section shall not apply to services specifically set forth in the Scope of Services or reasonably

contemplated therein. Consultant hereby acknowledges that it accepts the risk that the services to be provided pursuant to the Scope of Services may be more costly or time consuming than Consultant anticipates and that Consultant shall not be entitled to additional compensation therefor.

1.7 Special Requirements. Additional terms and conditions of this Agreement, if any, which are made a part hereof are set forth in the "Special Requirements" attached hereto as *Exhibit "B"* and incorporated herein by this reference. In the event of a conflict between the provisions of *Exhibit "B"* and any other provisions of this Agreement, the provisions of *Exhibit "B"* shall govern.

1.8 Environmental Laws. Consultant shall comply with all applicable environmental laws, ordinances, codes and regulations of Federal, State, and local governments. Consultant shall also comply with all applicable mandatory standards and policies relating to energy efficiency.

2.0 COMPENSATION

2.1 Contract Sum. For the services rendered pursuant to this Agreement, Consultant shall be compensated in accordance with the "Fee Proposal" attached hereto as *Exhibit "C"* and incorporated herein by this reference. The method of compensation may include: (i) a lump sum payment upon completion, (ii) payment in accordance with the percentage of completion of the services, (iii) payment for time and materials based upon the Consultant's rates as specified in the Schedule of Compensation, but not exceeding the Contract Sum or (iv) such other methods as may be specified in the Schedule of Compensation. Compensation may include reimbursement for actual and necessary expenditures approved by the Contract Officer in advance if specified in the Schedule of Compensation. The Contract Sum shall include the attendance of Consultant at all project meetings reasonably deemed necessary by the City.

Consultant agrees that if Consultant becomes aware of any facts, circumstances, techniques, or events that may or will materially increase or decrease the cost of the work or services or, if Consultant is providing design services, the cost of the project being designed, Consultant shall promptly notify the Contract Officer of said fact, circumstance, technique or event and the estimated increased or decreased cost related thereto and, if Consultant is providing design services, the estimated increased or decreased cost estimate for the project being designed.

2.2 Method of Payment. Unless some other method of payment is specified in the Schedule of Compensation, in any month in which Consultant wishes to receive payment, no later than the first (1st) working day of such month, Consultant shall submit to the City, in a form approved by the City's Director of Finance, an invoice for services rendered prior to the date of the invoice. Except as provided in Section 7.2, City shall pay Consultant for all expenses stated thereon which are approved by City pursuant to this Agreement generally within thirty (30) days, and no later than forty-five (45) days, from the submission of an invoice in an approved form. City will review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement. If no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by City, the invoice will be returned by City to Consultant for correction and resubmission. City reserves the right to withhold future payment to Consultant if any aspect of the Consultant's work is found substantially inadequate.

2.3 Availability of Funds. It is mutually understood between the parties that this Agreement is valid and enforceable only if sufficient funds are made available by the City Council of the City for

the purposes of this Agreement. The availability of funding is affected by matters outside the City's control, including other governmental entities. Accordingly, the City has the option to void the whole Agreement or to amend the Agreement to reflect unanticipated reduction in funding for any reason.

3.0 PERFORMANCE SCHEDULE

3.1 Time of Essence. Time is of the essence in the performance of this Agreement.

3.2 Schedule of Performance. Consultant shall commence the services pursuant to this Agreement upon receipt of a written notice to proceed and shall perform all services within the time period(s) established in the "Schedule of Performance" attached hereto as *Exhibit "D"*, if any, and incorporated herein by this reference.

3.3 Force Majeure. The time period(s) specified in the Schedule of Performance for performance of the services rendered pursuant to this Agreement shall be extended because of any delays due to unforeseeable causes beyond the control and without the fault or negligence of the Consultant, including, but not restricted to, acts of God or of the public enemy, unusually severe weather, fires, earthquakes, floods, epidemics, quarantine restrictions, riots, strikes, freight embargoes, wars, litigation, and/or acts of any governmental agency, including the City, if the Consultant shall, within ten (10) days of the commencement of such delay, notify the Contract Officer in writing of the causes of the delay. The Contract Officer shall ascertain the facts and the extent of delay and extend the time for performing the services for the period of the enforced delay when and if, in the judgment of the Contract Officer, such delay is justified. The Contract Officer's determination shall be final and conclusive upon the parties to this Agreement. In no event shall Consultant be entitled to recover damages against the City for any delay in the performance of this Agreement, however caused; Consultant's sole remedy being extension of the Agreement pursuant to this Section.

3.4 Term. Unless earlier terminated in accordance with Section 7.4 below, this Agreement shall begin on December 5, 2023 and continue in full force and effect until completion of the services no later than December 4, 2024.

4.0 COORDINATION OF WORK

4.1 Representative of Consultant. Bill Zimmerman is hereby designated as being the representative of Consultant authorized to act on its behalf with respect to the work or services specified herein and to make all decisions in connection therewith.

It is expressly understood that the experience, knowledge, capability and reputation of the representative was a substantial inducement for City to enter into this Agreement. Therefore, the representative shall be responsible during the term of this Agreement for directing all activities of Consultant and devoting sufficient time to personally supervise the services hereunder. For purposes of this Agreement, the representative may not be replaced nor may his responsibilities be substantially reduced by Consultant without the express written approval of City.

4.2 Contract Officer. The City's City Manager is hereby designated as the representative of the City authorized to act in its behalf with respect to the work and services and to make all decisions in connection therewith ("Contract Officer"). It shall be the Consultant's responsibility to assure that the Contract Officer is kept informed of the progress of the performance of the services and the Consultant

shall refer any decisions which must be made by City to the Contract Officer. The City may designate another Contract Officer by providing written notice to Consultant.

4.3 Prohibition Against Subcontracting or Assignment. The experience, knowledge, capability and reputation of Consultant, its principals and employees were a substantial inducement for the City to enter into this Agreement. Therefore, Consultant shall not contract with any other entity to perform in whole or in part the services required hereunder without the express written approval of the City. In addition, neither this Agreement nor any interest herein may be transferred or assigned without the prior written approval of City. Transfers restricted hereunder shall include the transfer to any person or group of persons acting in concert of more than twenty five percent (25%) of the present ownership and/or control of Consultant taking all transfers into account on a cumulative basis. A prohibited transfer or assignment shall be void. No approved transfer shall release the Consultant or any surety of Consultant of any liability hereunder without the express consent of City.

4.4 Independent Contractor. Neither the City nor any of its employees shall have any control over the manner or means by which Consultant or employees, perform the services required herein, except as otherwise set forth herein. Consultant shall perform all services required herein as an independent contractor of City and shall remain under only such obligations as are consistent with that role. Consultant represents and warrants that the personnel used to provide services to the City pursuant to this Agreement are classified by Consultant as employees. Consultant shall not at any time or in any manner represent that it or any of its employees are employees of City. City shall not in any way or for any purpose become or be deemed to be a partner of Consultant in its business or otherwise or a joint venturer or a member of any joint enterprise with Consultant. In the event that Consultant or any employee of Consultant providing services under this Agreement claims or is determined by a federal or state agency, a court of competent jurisdiction, or the California Public Employees' Retirement System ("CalPERS") to be classified as other than an independent contractor for the City, then Consultant shall indemnify, defend, and hold harmless the City for the payment of any and all assessed fines, penalties, judgments, employee and/or employer contributions, and any other damages and costs assessed to the City as a consequence of, or in any way attributable to, the assertion that Consultant or any staff Consultant used to provide services under this Agreement are employees of the City.

5.0 INSURANCE AND INDEMNIFICATION

5.1 Insurance. Consultant shall procure and maintain, at its sole cost and expense, in a form and content satisfactory to City, during the entire term of this Agreement including any extension thereof, the following policies of insurance:

(a) Commercial General Liability Insurance. A policy of commercial general liability insurance using Insurance Services Office "Commercial General Liability" policy form CG 00 01, with an edition date prior to 2004, or the exact equivalent. Coverage for an additional insured shall not be limited to its vicarious liability. Defense costs must be paid in addition to limits. Limits shall be no less than $1,000,00.00 per occurrence for all covered losses and no less than $2,000,000.00 general aggregate.

(b) Workers' Compensation Insurance. A policy of workers' compensation insurance on a state-approved policy form providing statutory benefits as required by law with employer's liability limits no less than $1,000,000 per accident for all covered losses.

(c) Automotive Insurance. A policy of comprehensive automobile liability insurance written on a per occurrence basis in an amount not less than $1,000,000.00 per accident, combined single limit. Said policy shall include coverage for owned, non owned, leased and hired cars.

(d) Professional Liability or Error and Omissions Insurance. A policy of professional liability insurance in an amount not less than $1,000,000.00 per claim with respect to loss arising from the actions of Consultant performing professional services hereunder on behalf of the City. Any policy inception date, continuity date, or retroactive date must be before the effective date of this Agreement and Consultant agrees to maintain continuous coverage through a period no less than three (3) years after completion of the services required by this Agreement.

All of the above policies of insurance shall be primary insurance. The general liability policy shall name the City, its officers, employees and agents ("City Parties") as additional insureds and shall waive all rights of subrogation and contribution it may have against the City and the City's Parties and their respective insurers. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. All of said policies of insurance shall also provide that said insurance may be not cancelled without providing ten (10) days prior written notice by registered mail to the City. In the event any of said policies of insurance are cancelled or amended, Consultant shall, prior to the cancellation or amendment date, submit new evidence of insurance in conformance with this Section 5.1 to the Contract Officer. No work or services under this Agreement shall commence until Consultant has provided City with Certificates of Insurance or appropriate insurance binders evidencing the above insurance coverages and said Certificates of Insurance or binders are approved by City.

Consultant agrees that the provisions of this Section 5.1 shall not be construed as limiting in any way the extent to which Consultant may be held responsible for the payment of damages to any persons or property resulting from Consultant's activities or the activities of any person or persons for which Consultant is otherwise responsible. If the Consultant's insurance policies have higher limits and coverage than those required by this contract, the City will have access to those higher limits and coverage maintained by the Consultant.

The insurance required by this Agreement shall be satisfactory only if issued by companies qualified to do business in California, rated "A" or better in the most recent edition of Best Rating Guide or The Key Rating Guide, and only if they are of a financial category Class VII or better, unless such requirements are waived by the Risk Manager of the City due to unique circumstances.

In the event that the Consultant is authorized to subcontract any portion of the work or services provided pursuant to this Agreement, the contract between the Consultant and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Consultant is required to maintain pursuant to this Section 5.1.

5.2 Indemnification.

(a) Indemnity for Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, and except for the statutory limits set forth under California Civil Code Section 2782,8 applicable to services provided by a "design professional", Consultant shall indemnify, defend and hold harmless City and the City's Parties from and against any and all losses, liabilities, damages, costs and expenses, including

attorneys' fees and costs to the extent same are caused in whole or in part by any negligent or wrongful act, error or omission of Consultant, its officers, employees of subcontractors (or any entity or individual for which Consultant shall bear legal liability) in the performance of professional services under this Agreement.

(b) Indemnity for Other Than Design Professional Liability. Other than in the performance of design professional services and to the full extent permitted by law, Consultant shall indemnify, defend and hold harmless City and City's Parties from and against any liability (including liability for claims, suits, actions, losses, expenses or costs of any kind, whether actual, alleged or threatened, including attorneys' fees and costs, court costs, defense costs and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Consultant or by any individual or entity for which Consultant is legally liable, including but not limited to officers, employees or subcontractors of Consultant.

6.0 RECORDS AND REPORTS

6.1 Reports. Consultant shall periodically prepare and submit to the Contract Officer such reports concerning the performance of the services required by this Agreement as the Contract Officer shall require.

6.2 Records. Consultant shall keep, and require subcontractors to keep, such books and records as shall be necessary to perform the services required by this Agreement and enable the Contract Officer to evaluate the performance of such services. The Contract Officer shall have full and free access to such books and records at all times during normal business hours of City, including the right to inspect, copy, audit and make records and transcripts from such records. Such records shall be maintained for a period of three (3) years following completion of the services hereunder, and the City shall have access to such records in the event any audit is required.

6.3 Ownership of Documents. All drawings, specifications, reports, records, documents and other materials prepared by Consultant, its employees, and subcontractors in the performance of this Agreement shall be the property of City and shall be delivered to City upon request of the Contract Officer or upon the termination of this Agreement and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by City of its full rights of ownership of such documents and materials. Consultant may retain copies of such documents for its own use and Consultant shall have an unrestricted right to use the concepts embodied therein. All subcontractors shall provide for assignment to City of any documents or materials prepared by them, and in the event Consultant fails to secure such assignment, Consultant shall indemnify City for all damages resulting therefrom. Except as necessary for the performance of services under this Agreement, no documents prepared under this Agreement may be released by Contractor to any other person or entity without City's prior written approval. Consultant warrants that all Documents it drafts and completes pursuant to this Agreement constitute original work. Specifically, Consultant understands and agrees that use of artificial intelligence (AI) tools including, without limitation, ChatGPT, Microsoft's Bing Chat, Google's Bard, and Meta's LLaMA (Large Language Model Meta AI), in the performance of this Agreement does not constitute an original work, i.e., submitting Documents generated by such AI tools to City and representing it as Consultant's original work constitutes a material breach of this Agreement, constitutes a false claim, and may also violate applicable intellectual property right laws including, without limitation, United States Copyright Law. Accordingly, and notwithstanding any other provision of this Agreement as to ownership, City specifically rejects ownership of such Documents. Consultant

is required to indemnify and defend City to the fullest extent allowed by applicable law should it violate this Section.

6.4 Confidentiality of Information. All information gained or work product produced by Contractor in performance of this Agreement will be considered confidential, unless such information is in the public domain or already known to Contractor. Contractor may not release or disclose any such information or work product to persons or entities other than City without prior written authorization from the City Manager, except as may be required by law. Contractor, its officers, employees, or agents, may not, without prior written authorization from the City Manager or unless requested by the City Attorney of City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the services performed under this Agreement. Response to a subpoena or court order will not be considered "voluntary" provided Contractor gives City notice of such court order or subpoena. If Contractor, or any officer, employee, or agent of Contractor, provides any information or work product in violation of this Agreement, then City will have the right to reimbursement and indemnity from Contractor for any damages, costs and fees, including attorney's fees, caused by or incurred as a result of Contractor's conduct. Contractor must promptly notify City should Contractor, its officers, employees, or agents be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. City retains the right, but has no obligation, to represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Contractor. However, this right to review any such response does not imply or mean the right by City to control, direct, or rewrite such response. All media and press releases, including graphic display information, must be approved and distributed solely by City, unless otherwise agreed to in writing by City. All media interviews regarding the performance of services under this Agreement are prohibited unless expressly authorized by City.

7.0 ENFORCEMENT OF AGREEMENT

7.1 California Law. This Agreement shall be construed and interpreted both as to validity and to performance of the parties in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in relation to this Agreement shall be instituted in the Superior Court of the County of Los Angeles, State of California, or any other appropriate court in such county, and Consultant agrees to submit to the personal jurisdiction of such court in the event of such action.

7.2 Retention of Funds. Consultant hereby authorizes City to deduct from any amount payable to Consultant (whether or not arising out of this Agreement) (i) any amounts the payment of which may be in dispute hereunder or which are necessary to compensate City for any losses, costs, liabilities, or damages suffered by City, and (ii) all amounts for which City may be liable to third parties, by reason of Consultant's acts or omissions in performing or failing to perform Consultant's obligation under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by Consultant, City may withhold from any payment due, without liability for interest because of such withholding, an amount sufficient to cover such claim. The failure of City to exercise such right to deduct or to withhold shall not, however, affect the obligations of the Consultant to insure, indemnify, and protect City as elsewhere provided herein.

7.3 Waiver. No delay or omission in the exercise of any right or remedy by a non-defaulting party on any default shall impair such right or remedy or be construed as a waiver. A party's consent to or approval of any act by the other party requiring the party's consent or approval shall not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Agreement.

7.4 Termination Prior to Expiration of Term. Either party may terminate this Agreement at any time, with or without cause, upon thirty (30) days' written notice to the other party. Upon receipt of any notice of termination, Consultant shall immediately cease all work or services hereunder except such as may be specifically approved by the Contract Officer. Consultant shall be entitled to compensation for the reasonable value of the work product actually produced prior to the effective date of the notice of termination and for any services authorized by the Contract Officer thereafter in accordance with the Schedule of Compensation and City shall be entitled to reimbursement for any compensation paid in excess of the services rendered.

7.5 Completion of Work After Termination for Default of Consultant. If termination is due to the failure of the Consultant to fulfill its obligations under this Agreement, City may, after compliance with the provisions of Section 7.2, take over the work and prosecute the same to completion by contract or otherwise, and the Consultant shall be liable to the extent that the total cost for completion of the services required hereunder exceeds the compensation herein stipulated (provided that the City shall use reasonable efforts to mitigate such damages), and City may withhold any payments to the Consultant for the purpose of set-off or partial payment of the amounts owed the City as previously stated.

7.6 Attorneys' Fees. If either party to this Agreement is required to initiate or defend or made a party to any action or proceeding in any way connected with this Agreement, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, shall be entitled to reasonable attorneys' fees, whether or not the matter proceeds to judgment, and to all other reasonable costs for investigating such action, taking depositions and discovery, including all other necessary costs the court allows which are incurred in such litigation.

8.0 CITY OFFICERS AND EMPLOYEES: NON-DISCRIMINATION

8.1 Non-liability of City Officers and Employees. No officer or employee of the City shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Consultant or to its successor, or for breach of any obligation of the terms of this Agreement.

8.2 Conflict of Interest; City. No officer or employee of the City shall have any financial interest in this Agreement nor shall any such officer or employee participate in any decision relating to the Agreement which affects his financial interest or the financial interest of any corporation, partnership or association in which he is interested, in violation of any State statute or regulation.

8.3 Conflict of Interest; Consultant. Consultant warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Agreement. Consultant shall comply with all conflict of interest laws and regulations including, without limitation, City's Conflict of Interest Code which is on file in the City Clerk's office. Accordingly, should the City Manager determine that Consultant will be performing a specialized or general service for the City and

there is substantial likelihood that the Consultant's work product will be presented, either written or orally, for the purpose of influencing a governmental decision, the Consultant and its officers, or employees, as applicable, shall be subject to the City's Conflict of Interest Code.

8.4 Covenant Against Discrimination. Consultant covenants that, by and for itself, its executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin, or ancestry in the performance of this Agreement. Consultant shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, national origin or ancestry.

9.0 MISCELLANEOUS PROVISIONS

9.1 Notice. Any notice or other communication either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class mail, in the case of the City, to the City Manager and to the attention of the Contract Officer, City of Lawndale, 14717 Burin Avenue, Lawndale, California 90260, and in the case of the Consultant, to the person at the address designated on the execution page of this Agreement. Either party may change its address by notifying the other party of the change of address in writing. Notice shall be deemed communicated at the time personally delivered or in seventy-two (72) hours from the time of mailing if mailed as provided in this Section.

9.2 Interpretation. The terms of this Agreement shall be construed in accordance with the meaning of the language used and shall not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction which might otherwise apply.

9.3 Integration; Amendment. It is understood that there are no oral agreements between the parties hereto affecting this Agreement and this Agreement supersedes and cancels any and all previous negotiations, agreements and understandings, if any, between the parties, and none shall be used to interpret this Agreement. This Agreement may be amended at any time by an instrument in writing signed by both parties.

9.4 Severability. Should a portion of this Agreement be declared invalid or unenforceable by a judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining portions of this Agreement which are hereby declared as severable and shall be interpreted to carry out the intent of the parties unless the invalid provision is so material that its invalidity deprives either party of the basic benefit of their bargain or renders this Agreement meaningless.

9.5 Corporate Authority. The persons executing this Agreement on behalf of the parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement, such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which said party is bound. This Agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties.

9.6 Counterparts. This Agreement may be executed in several counterparts, each of which will constitute one and the same instrument and will become binding upon the parties when at least one copy has been signed by both parties. This Agreement and any amendment will be considered executed when the signature page of a party is delivered by facsimile or other electronic transmission. Such electronic signatures will have the same effect as an original signature, provided that a wet signature copy is also mailed to the other party.

9.7 Modification of Agreement. No amendment to or modification of this Agreement will be valid unless made in writing and approved by Consultant and by the City Council or City Manager, as applicable. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.

[SIGNATURES ON FOLLOWING PAGE]

Attachment 1

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

CITY:
CITY OF LAWNDALE,
a municipal corporation

By: _____
Robert Pullen -Miles, Mayor

ATTEST:

_____
Erica Harbison, City Clerk

APPROVED AS TO FORM:
Burke Williams & Sorensen, LLP

_____
Gregory M. Murphy, City Attorney

CONSULTANT:
W.G. Zimmerman Engineering, Inc.
a [California corporation]

By: _____
Name: William G. Zimmerman
Title: President

By: _____
Name: William G. Zimmerman
Title: Secretary

Address: 7812 Edinger Avenue Suite 302
Huntington Beach, CA 92647

EXHIBIT "A"

SCOPE OF SERVICES

Provide on-call Traffic Engineering services to conduct field data collection and prepare engineering and traffic surveys in accordance with state law. The following services are specifically requested:

1. **Traffic signal design**
2. **Signing and striping design**
3. **Worksite traffic control design**
4. **Traffic calming design**
5. **Parking studies**
6. **School-related operations**
7. **ITS and communication design**
8. **Plan review services**
9. **Traffic study review**
10. **Conceptual design of roundabouts and similar improvements**
11. **Engineering and traffic surveys**
12. **Collision trend analysis and other safety studies**

EXHIBIT "B"

SPECIAL REQUIREMENTS

A new Section 2.4 is added to the Agreement to read as follows:

"2.4 Prevailing Wages; Indemnification. Consultant and all subcontractors shall comply with the State Labor standards. State Labor standards provisions, including prevailing wage requirements, will be enforced such that the general rate of per diem wages (prevailing wage) shall be paid for each craft, classification, or type of worker needed to execute the contract to all workers employed in the execution of the contract for the work to be performed by W.G. Zimmernam Engineering, Inc. The State General Prevailing Wage Determination is as established by the California Department of Industrial Relations for Los Angeles County. *(Refer to http://www.dir.ca.gov/OPRL/PWD/Determinations/Statewide/C-TT.pdf for additional information.)* The prevailing rate of per diem wages are on file at the City of Lawndale Department of Public Works, 4722 Manhattan Beach Boulevard, Lawndale, California 90266, and are available to any interested party on request. The statutory provisions for penalties for failure to pay prevailing wages and/or failure to otherwise comply with state's wage and hour laws will be enforced. The Consultant is required to post at the job site the prevailing rate of per diem wages and other notices prescribed by regulation.

The Consultant and all subcontractors must submit electronic certified payroll records weekly directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) no less than monthly and must comply with all statutory requirements relating to certified copies of payroll records, including the maintenance of the records, their certification, and their availability for inspection as required by Labor Code Section 1776 and as required under Subsection 7-2.6 of said Standard Specifications for Public Works Construction.

Consultant shall indemnify, defend with legal counsel approved by the City, and hold the City and City's Parties harmless from and against any all liability, loss, damage, costs, or expenses (including attorneys' fees and court costs) arising from or as a result of any action, claim, or determination relating in any way to the failure to properly pay of prevailing wages. Moreover, the City retains the right to settle or abandon any such the matter without the Consultant's consent as to the City's liabilities or rights only."

- A new Section 5.1(e) is added to the Agreement to read as follows:

(e) Cyber Liability Insurance. The cyber liability insurance must include the following coverage:

- Liability arising from the theft, dissemination and/or use of confidential or personally identifiable information; including credit monitoring and regulatory fines arising from such theft, dissemination or use of the confidential information.

- Network security liability arising from the unauthorized use of, access to, or tampering with computer systems.
- Liability arising from the failure of technology products (software) required under the Agreement for Contractor to properly perform the services intended.
- Electronic media liability arising from personal injury, plagiarism or misappropriation of ideas, domain name infringement or improper deep-linking or framing, and infringement or violation of intellectual property rights.
- Liability arising from the failure to render professional services

If coverage is maintained on a "claims-made" basis, Contractor must maintain such coverage for an additional period of three years following termination of the Agreement.

EXHIBIT "C"

SCHEDULE OF COMPENSATION

Statement of Qualifications: On-Call Traffic Engineering

5 – COST PROPOSAL

W.G. Zimmerman Engineering, Inc.

City of Lawndale Billing Rate Schedule

Classification	Rate
Project Manager/Traffic Engineer (Registered)	$ 190.00/Hr
Senior Project Engineer (Registered)	$ 180.00/Hr
Project Engineer	$ 130.00/Hr
Senior Design Engineer	$ 125.00/Hr
Design Engineer	$ 120.00/Hr
Administration/Office Support	$ 90.00/Hr

Non-Labor Expenses	
Printing	Cost plus 5%
Reproduction (Blue lines)	Cost plus 5%
Other Expenses (such as sub-consultants, outside services or special equipment needs)	Cost plus 5%

Attachment 1

EXHIBIT "D"

SCHEDULE OF PERFORMANCE

Not applicable

ACTION BY INCORPORATOR OF

W.G. ZIMMERMAN ENGINEERING, INC.

The undersigned, being the sole Incorporator named in the Articles of Incorporation of W.G. Zimmerman Engineering, Inc., does hereby adopt the following resolutions:

1. Adoption of Bylaws.

The Bylaws bearing the heading "BYLAWS OF **W.G. ZIMMERMAN ENGINEERING, INC.**" be and the same hereby are adopted as and for the Bylaws of this corporation. A copy of such Bylaws are to be inserted in the Book of Minutes of the Corporation.

2. Election of Directors.

The following person be and he hereby is elected Director of this corporation, to serve until the first annual meeting of the shareholders of the corporation and until his successor is elected and qualified or until his earlier resignation or removal, or his office is declared vacant in the manner provided in the Bylaws of the corporation:

WILLIAM G. ZIMMERMAN

3. Election of Officers.

The following person be, and he hereby is elected as, officer of this corporation, to hold the office or offices set forth opposite his respective name until the first meeting of the Board of Directors following the next annual meeting of shareholders of this corporation and until his respective successors are elected and qualified, or until his earlier resignation or removal, and such officer shall serve at the pleasure of the Board of Directors of this corporation:

NAME	OFFICE
William G. Zimmerman	President, Secretary, and Chief Financial Officer

Dated: May 20, 1999

William G. Zimmerman

Sole Incorporator
William G. Zimmerman

B Y L A W S

O F

W.G. ZIMMERMAN ENGINEERING, INC.

A CALIFORNIA CORPORATION

Article I.

OFFICES

Section 1. PRINCIPAL EXECUTIVE OFFICE. The principal executive office of the corporation shall be located at such place as the board of directors shall from time to time determine.

Section 2. OTHER OFFICES. Other offices may at any time be established by the board of directors or the chief executive officer at any place or places where the corporation is qualified to do business.

Article II.

MEETINGS OF SHAREHOLDERS

Section 1. PLACE OF MEETINGS. All meetings of shareholders shall be held at the principal executive office of the corporation or at any other place within or without the State of California which may be designated either by the board of directors or by the shareholders in accordance with these bylaws.

Section 2. ANNUAL MEETINGS. The annual meetings of shareholders shall be held on the 3rd Thursday of April , of each year, at 3:00o'clock P.M. or at such other date and time as shall be designated from time to time by the board of directors or by the shareholders in accordance with these bylaws. If the date set forth in these bylaws falls upon a legal holiday, then such annual meeting of shareholders shall be held at the same time and place on the next day thereafter ensuing which is not a legal holiday. At such annual meetings, directors shall be elected, and any other business may be transacted which is within the powers of the shareholders.

Section 3. SPECIAL MEETINGS. Special meetings of the shareholders, for the purpose of taking any action which is within the powers of the shareholders, may be called at any time by the chairperson of the board or the president or by the board of directors, or by the holders of shares entitled to cast not less

the notice intends to present for action by the shareholders. Any proper matter may be presented at an annual meeting of shareholders though not stated in the notice, provided that unless the general nature of a proposal to be approved by the shareholders relating to the following matters is stated in the notice or a written waiver of notice, any such shareholder approval will require unanimous approval of all shareholders entitled to vote:

(a) a proposal to approve a contract or other transaction between the corporation and one or more of its directors or any corporation, firm or association in which one or more of its directors has a material financial interest or is also a director;

(b) A proposal to amend the articles of incorporation;

(c) A proposal to approve the principal terms of a reorganization as defined in Section 181 of the General Corporation Law;

(d) A proposal to wind up and dissolve the corporation;

(e) If the corporation has preferred shares outstanding and the corporation is in the process of winding up, a proposal to adopt a plan of distribution of shares, obligations or securities of any other corporation or assets other than money which is not in accordance with the liquidation rights of the preferred shares.

The notice of any meeting at which directors are to be elected shall include the names of nominees intended at the time of the notice to be presented by management for election.

Section 5. QUORUM. The presence in person or by proxy of the holders of a majority of the shares entitled to vote at any meeting shall constitute a quorum for the transaction of business. The shareholders present at a duly called or held meeting at which a quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum, if any action taken (other than adjournment) is approved by at least a majority of the shares required to constitute a quorum.

Section 6. ADJOURNED MEETINGS AND NOTICE THEREOF. Any shareholders' meeting, annual or special, whether or not a quorum is present, may be adjourned from time to time by vote of a majority of the shares the holders of which are either present in person or by proxy thereat, but in the absence of a quorum, no other business may be transacted at any such meeting, except as provided in Section 4 of this Article II.

When any shareholders' meeting, either annual or special, is adjourned for forty-five days or more, or if after the

to the voting and any shareholder has given notice at the meeting prior to the voting, of such shareholder's intention to cumulate his or her votes. The candidates receiving the highest number of votes up to the number of directors to be elected shall be elected.

Section 8. WAIVER OF NOTICE AND CONSENT OF ABSENTEES. The proceedings and transactions of any meeting of shareholders, either annual or special, however called and noticed and wherever held, shall be as valid as though had at a meeting duly held after regular call and notice, if a quorum is present either in person or by proxy, and if, either before or after the meeting, each of the persons entitled to vote, not present in person or by proxy, signs a written waiver of notice or a consent to the holding of such meeting, or an approval of the minutes thereof. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person objects, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened and except that attendance at a meeting is not a waiver of any right to object to the consideration of matters required by law or these bylaws to be included in the notice but which was not so included, if such objection is expressly made at the meeting, provided however, that any person making such objection at the beginning of the meeting or to the consideration of matters required to be but not included in the notice may orally withdraw such objection at the meeting or thereafter waive such objection by signing a written waiver thereof or a consent to the holding of the meeting or the consideration of the matter or an approval of the minutes of the meeting. Neither the business to be transacted at nor the purpose of any annual or special meeting of shareholders need be specified in any written waiver of notice except that the general nature of the proposals specified in subsections (a) through (e) of Section 4 of this Article II, shall be so stated. All such waivers, consents or approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 9. ACTION WITHOUT A MEETING. Directors may be elected without a meeting by a consent in writing, setting forth the action so taken, signed by all of the persons who would be entitled to vote for the election of directors, provided that, without notice except as hereinafter set forth, a director may be elected at any time to fill a vacancy not filled by the directors by the written consent of persons holding a majority of the outstanding shares entitled to vote for the election of directors.

Any other action which, under any provision of the General Corporation Law may be taken at any annual or special meeting, and without notice except as hereinafter set forth, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding shares having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon

the shareholder executing it specifies therein the length of time for which such proxy is to continue in force. Every proxy duly executed continues in full force and effect until revoked by the person executing it prior to the vote pursuant thereto. Except as otherwise provided by law, such revocation may be effected by attendance at the meeting and voting in person by the person executing the proxy or by a writing stating that the proxy is revoked or by a proxy bearing a later date executed by the person executing the proxy and filed with the secretary of the corporation or the persons appointed as inspectors of election or such other persons as may be designated by the board of directors or the chief executive officer to receive proxies.

Section 11. INSPECTORS OF ELECTION. In advance of any meeting of shareholders, the board of directors may appoint any persons as inspectors of election to act at such meeting or any adjournment thereof. If inspectors of election are not so appointed, or if any persons so appointed fail to appear or refuse to act, the chairperson of any such meeting may, and on the request of any shareholder or his or her proxy shall, make such appointment at the meeting. The number of inspectors shall be either one or three. If appointed at a meeting on the request of one or more shareholders or proxies, the majority of shares represented in person or by proxy shall determine whether one or three inspectors are to be appointed.

The inspectors of election shall determine the number of shares outstanding and the voting power of each, the shares represented at the meeting, the existence of a quorum and the authenticity, validity and effect of proxies, receive votes, ballots or consents, hear and determine all challenges and questions in any way arising in connection with the right to vote, count and tabulate all votes or consents, determine when the polls shall close, determine the result and do such acts as may be proper to conduct the election or vote with fairness to all shareholders. In the determination of the validity and effect of proxies the dates contained on the forms of proxy shall presumptively determine the order of execution of the proxies, regardless of the postmark dates on the envelopes in which they are mailed.

The inspectors of election shall perform their duties impartially, in good faith, to the best of their ability and as expeditiously as is practical. If there are three inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is prima facie evidence of the facts stated therein.

the votes cast against removal (or, if such action is taken by written consent, the shares held by persons not consenting in writing to such removal) would be sufficient to elect such director if voted cumulatively at an election at which the same total number of votes were cast (or, if such action is taken by written consent, all shares entitled to vote were voted) and the entire number of directors authorized at the time of the director's most recent election were then being elected. No reduction of the authorized number of directors shall have the effect of removing any director before his or her term of office expires.

Section 5. VACANCIES. Vacancies on the board of directors (except vacancies created by the removal of a director) may be filled by a majority of the directors then in office, whether or not less than a quorum, or by a sole remaining director, and each director elected in this manner shall hold office until the next annual meeting of shareholders and until a successor has been elected and qualified or until his or her earlier resignation or removal or his or her office has been declared vacant in the manner provided in these bylaws. A vacancy or vacancies on the board of directors shall exist on the death, resignation or removal of any director, or if the board declares vacant the office of a director if he or she is declared of unsound mind by an order of court or is convicted of a felony, or if the authorized number of directors is increased, or if the shareholders fail to elect the full authorized number of directors to be voted for at any shareholders meeting at which an election of directors is held. The shareholders may elect a director at any time to fill any vacancy not filled by the directors or which occurs by reason of the removal of a director. Any such election by written consent of shareholder shall require the consent of a majority of the outstanding shares entitled to vote. If the resignation of a director states that it is to be effective at a future time, a successor may be elected to take office when the resignation becomes effective.

Section 6. PLACE OF MEETINGS. Regular and special meetings of the board of directors shall be held at any place within or without the State of California which has been designated in the notice or written waiver of notice of the meeting, or, if not stated in the notice or waiver of notice or there is no notice, designated by resolution of the board of directors or, either before or after the meeting, consented to in writing by all members of the board who are not present at the meeting. If the place of a regular or special meeting is not designated in the notice or waiver of notice or fixed by a resolution of the board or consented to in writing by all members of the board not present at the meeting, it shall be held at the corporation's principal executive office.

Section 7. REGULAR MEETINGS. Immediately following each annual shareholders' meeting, the board of directors shall hold a

of the directors not present or who, though present, has prior to the meeting or at its commencement, protested the lack of proper notice to him or her, signs a written waiver of notice, or a consent to holding the meeting, or an approval of the minutes of the meeting. All such waivers, consents and approvals shall be filed with the corporate records or made a part of the minutes of the meeting. A notice or waiver of notice need not specify the purpose of any regular or special meeting of the board of directors. Notice of a meeting need not be given to any director who signs a waiver of notice, whether before or after the meeting, or who attends the meeting without protesting, prior to or at its commencement, the lack of notice to such director.

Section 11. ADJOURNMENT. A majority of the directors present, whether or not a quorum is present, may adjourn any meeting to another time and place. If the meeting is adjourned for more than 24 hours, notice of the adjournment to another time or place shall be given prior to the time of the adjourned meeting to the directors who were not present at the time of the adjournment.

Section 12. MEETINGS BY CONFERENCE TELEPHONE OR ELECTRONIC VIDEO SCREEN. Members of the board of directors may participate in a meeting through use of conference telephone, electronic video screen communication, or other communication equipment so long as all of the following apply:

(a) Each member participating in the meeting can communicate with all of the other members concurrently; and

(b) Each member is provided the means of participating in all matters before the board, including the capacity to propose, or to interpose an objection, to a specific action to be taken by the corporation; and

(c) The corporation adopts and implements some means of verifying both of the following;

(1) A person communicating by telephone, electronic video screen, or other communications equipment is a director entitled to participate in the board meeting; and

(2) All statements, questions, actions, or votes were made by that director and not by another person not permitted to participate as a director.

Section 13. ACTION WITHOUT A MEETING. Any action required or permitted to be taken by the board of directors may be taken without a meeting, if all members of the board shall individually or collectively consent in writing to such action. Such written consent or consents shall be filed with the minutes of the proceedings of the board. Such action by written consent shall have the same force and effect as a unanimous vote of such

committee shall be conducted. The provisions of these bylaws relating to the calling of meetings of the board, notice of meetings of the board and waiver of such notice, adjournments of meetings of the board, written consents to board meetings and approval of minutes, action by the board by consent in writing without a meeting, the place of holding such meetings, meetings by conference telephone or similar communications equipment, the quorum for such meetings, the vote required at such meetings and the withdrawal of directors after commencement of a meeting shall apply to committees of the board and action by such committees. In addition, any member of the committee designated by the board as the chairperson or as secretary of the committee or any two members of a committee may call meetings of the committee. Regular meetings of any committee may be held without notice if the time and place of such meetings are fixed by the board of directors or the committee.

Section 16. INDEMNIFICATION OF AGENTS.

(a) For the proposes of this section, "agent" means any person who is or was a director, officer, employee or other agent of this corporation, or is or was serving at the request of this corporation as a director, officer, employee or agent of another foreign or domestic corporation, partnership, joint venture, trust or other enterprise, or was a director, officer, employee or agent of a foreign or domestic corporation which was predecessor corporation of this corporation or of another enterprise at the request of such predecessor corporation; "proceeding" means any threatened, pending or completed action or proceeding, whether civil, criminal, administrative or investigative; and "expenses" includes, without limitation, attorneys' fees and any expenses of establishing a right to indemnification under subdivision (d) or subdivision (e) (3) of this Section.

(b) This corporation shall indemnify any person who was or is a party or is threatened to be made a party to any proceeding (other than an action by or in the right of this corporation) by reason of the fact that such person is or was an agent of this corporation, against expenses, judgements, fines, settlements and other amounts actually and reasonably incurred in connection with such proceeding if such person acted in good faith and in a manner such person reasonably believed to be in the best interests of this corporation and, in the case of a criminal proceeding, had no reasonable cause to believe the conduct of such person was unlawful. The termination of any proceeding by judgement, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in the best interests of this corporation or that the person had reasonable cause to believe that the person's conduct was unlawful.

shares owned by the person to be indemnified shall not be considered outstanding or entitled to vote thereon; or

(3) The court in which such proceeding is or was pending, upon application made by this corporation or the agent or the attorney or other person rendering services in connection with the defense, whether or not such application by the agent, attorney or other person is opposed by this corporation.

(f) Expense incurred in defending any proceeding may be advanced by this corporation prior to the final disposition of such proceeding upon receipt of an undertaking by or on behalf of the agent to repay such amount unless it shall be determined ultimately that the agent is entitled to be indemnified as authorized in this Section.

(g) Nothing contained in this Section shall affect any right to indemnification to which persons other than directors and officers of this corporation or any subsidiary hereof may be entitled by contract or otherwise.

(h) No indemnification or advance shall be made under this Section, except as provided in subdivision (d) or subdivision (e) (3), in any circumstance where it appears:

(1) That it would be inconsistent with a provision of the articles of incorporation, a resolution of the shareholders or an agreement in effect at the time of the accrual of the alleged cause of action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(2) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

(i) Upon and in the event of a determination by the board of directors of this corporation to purchase such insurance, this corporation shall purchase and maintain insurance on behalf of any agent of the corporation against any liability asserted against or incurred by the agent in such capacity or arising out of the agent's status as such whether or not this corporation would have the power to indemnify the agent against such liability under the provisions of this Section.

Article IV

OFFICERS

Section 1. OFFICERS The officers of the corporation shall be a chairperson of the board or a president, or both, a secretary and a chief financial officer. The corporation may also

of the corporation and shall exercise the duties of the president as set forth in Section 7.

Section 7. PRESIDENT. Subject to any supervisory powers, if any, that may be given by the board of directors or the bylaws or the chairperson of the board, if there be such an officer, the president shall be the corporation's general manager and chief executive officer and shall, subject to the control of the board of directors, have general supervision, direction and control of the business, affairs and officers of the corporation. Unless otherwise determined by the board of directors, he or she shall preside as chairperson at all meetings of the shareholders, and in the absence of the chairperson of the board, or if there be none, at all meetings of the board of directors. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation; shall have any other powers and duties that are prescribed by the board of directors or the bylaws; and shall be primarily responsible for carrying out all orders and resolutions of the board of directors.

Section 8. VICE PRESIDENTS. In the absence or disability of the chief executive officer, the vice presidents in order of their rank as fixed by the board of directors, or if not ranked, the vice president designated by the board of directors, or if there has been no such designation, the vice president designated by the chief executive officer, shall perform all the duties of the chief executive officer, and when so acting, shall have all the powers of, and be subject to all the restrictions on, the chief executive officer. Each vice president shall have any of the powers and perform any other duties that from time to time may be prescribed for him or her by the board of directors or the bylaws or the chief executive officer.

Section 9. SECRETARY. The secretary shall keep or cause to be kept a book of minutes of all meetings and actions by written consent of all directors, shareholders and committees of the board of directors. The minutes of each meeting shall state the time and place that it was held and such other information as shall be necessary to determine whether the meeting was held in accordance with law and these bylaws and the actions taken thereat. The secretary shall keep or cause to be kept at the corporation's principal executive office, or at the office of its transfer agent or registrar, a record of the shareholders of the corporation, giving the names and addresses of all shareholders and the number and class of shares held by each. The secretary shall give, or cause to be given, notice of all meetings of shareholders, directors and committees required to be given under these bylaws or by law, shall keep or cause the keeping of the corporate seal in safe custody and shall have any other powers and perform any other duties that are prescribed by the board of directors or the bylaws or the chief executive officer. If the secretary refuses or fails

rights, or to exercise the rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date, except as otherwise provided in the articles of incorporation or bylaws.

Section 2. INSPECTION OF CORPORATE RECORDS. The books of account, record of shareholders, and minutes of proceedings of the shareholders and the board and committees of the board of this corporation shall be open to inspection upon the written demand on the corporation of any shareholder or holder of a voting trust certificate at any time during usual business hours, for a purpose reasonably related to such holder's interests as a shareholder or as the holder of such voting trust certificate. Such inspection by a shareholder or holder of a voting trust certificate may be made in person or by agent or attorney, and the right of inspection includes the right to copy and make extracts.

A shareholder or shareholders holding at least five percent in the aggregate of the outstanding voting shares of the corporation or who hold at least one percent of such voting shares and have filed a Schedule 14B with the United States Securities and Exchange Commission relating to the election of directors of the corporation shall have (in person or by agent or attorney) the absolute right to inspect and copy the record of shareholders' names and addresses and shareholdings during usual business hours upon five business days' prior written demand upon the corporation and to obtain from the transfer agent for the corporation, upon written demand and upon the tender of its usual charges, a list of the shareholders' names and addresses, who are entitled to vote for the election of directors, and their shareholdings, as of the most recent record date for which it has been compiled or as of a date specified by the shareholder subsequent to the date of demand. The list shall be made available on or before the later of five business days after the demand is received or the date specified wherein as the date as of which the list is to be compiled.

Every director shall have the absolute right at any reasonable time to inspect and copy all books, records and documents of every kind and to inspect the physical properties of this corporation and any subsidiary of this corporation. Such inspection by a director may be made in person or by agent or attorney and the right of inspection includes the right to copy and make extracts.

Section 3. CHECKS, DRAFTS, ETC. All checks, drafts or other orders for payment of money, notes or other evidences of indebtedness, issued in the name of or payable to the corporation, shall be signed or endorsed by such person or persons and in such manner as, from time to time, shall be determined by resolution of the board of directors. The board of directors may authorize one or more officers of the corporation to designate the person or

Any report sent to the shareholders shall be given personally or by mail or other means of written communication, charges prepaid, addressed to such shareholder at the address of such shareholder appearing on the books of the corporation or given by such shareholder to the corporation for the purpose of notice or sent forth in the written request of the shareholder as provided in this Section. If any report addressed to the shareholder at the address of such shareholder appearing on the books of the corporation is returned to the corporation by the United States Postal Service marked to indicate that the United States Postal Service is unable to deliver the report to the shareholder at such address, all future reports shall be deemed to have been duly given without further mailing if the same shall be available for the shareholder upon written demand of the shareholder at the principal executive office of the corporation for a period of one year from the date of the giving of the report to all other shareholders. If no address appears on the books of the corporation or is given by the shareholder to the corporation for the purpose of notice or is set forth in the written request of the shareholder as provided in this Section, such shareholder if sent by mail or other means of written communication addressed to the place where the principal executive office of the corporation is located, or if published at least once in a newspaper of general circulation in the county in which the principal executive office is located. Any such report shall be deemed to have been given at the time when delivered personally or deposited in the mail or sent by other means of written communication. An affidavit of mailing of any such report in accordance with the foregoing provisions, executed by the secretary, assistant secretary or any transfer agent of the corporation shall be prima facie evidence of the giving of the report.

Section 5. CONTRACTS, ETC., HOW EXECUTED. The board of directors, except as the bylaws or articles of incorporation otherwise provide, may authorize any officer or officers, agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances.

Section 6. CERTIFICATE FOR SHARES. Every holder of shares in the corporation shall be entitled to have a certificate or certificates signed in the name of the corporation by the chairperson or vice chairperson of the board or the president or a vice president and by the chief financial officer or an assistant treasurer or the secretary or any assistant secretary, certifying the number of shares and the class or series of shares owned by the shareholder. Any or all of the signatures on the certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were such

as amended to date.

Section 9. SEAL. The corporation shall have a common seal, and shall have inscribed thereon the name of the corporation, the date of its incorporation, and the words "INCORPORATED" and "CALIFORNIA".

Section 10. CONSTRUCTION AND DEFINITIONS. Unless the context otherwise requires, the general provisions, rules of construction and definitions contained in the General Corporation Law shall govern the construction of these bylaws. Without limiting the generality of the foregoing, the masculine gender includes the feminine and neuter, the singular number includes the plural and the plural number includes the singular, and the term "Person" includes a corporation as well as a natural person.

Article VI

AMENDMENTS

Section 1. POWER OF SHAREHOLDERS. New bylaws may be adopted or these bylaws may be amended or repealed by the affirmative vote of a majority of the outstanding shares entitled to vote, or by the written assent of shareholders entitled to vote such shares, except as otherwise provided by law or by the articles of incorporation.

Section 2. POWER OF DIRECTORS. Subject to the right of shareholders as provided in Section 1 of this Article VI, the board of directors may adopt, amend or repeal bylaws other than a bylaw, or amendment thereof, changing the authorized number of directors.

Article VII

RESTRICTIONS ON TRANSFER OF SHARES

Section 1. TRANSFER FOR CONSIDERATION. In order to effect a valid sale, exchange, or other transfer with consideration, (collectively "transfer") of any of the shares of the corporation by any holder thereof, he or she shall first offer the shares to the corporation and then to the other holders of shares in the following manner:

(1) Such offering shareholder shall deliver to the secretary of the corporation a written notice indicating his or her intention to transfer shares of the corporation together with a copy of the written agreement concerning the proposed transfer, whether the same is executed or not, and if not in writing, then a written statement identifying the proposed transferee(s), and setting forth the price, terms and conditions of such proposed transfer and the number of shares to be transferred. Within 20 days thereafter, the corporation shall have the prior right to purchase all of such shares so offered at the price and upon the

so. Within 7 days thereafter, each remaining shareholder shall deliver to the secretary, by mail or otherwise, a written notice of his or her consent or disapproval of the proposed transfer. No such gift or transfer shall be valid without the consent of shareholders holding 51% percent of the outstanding shares entitled to vote. In the event that any shareholder does not provide a written response to the secretary within the time period provided above, said failure to respond shall be deemed equivalent to that shareholder's consent to the proposed transfer.

Section 3. REQUIREMENT OF COMPLIANCE. Any transfer or purported transfer of the shares of the corporation, whether for consideration or not, shall be null and void unless the terms, conditions, and provisions of this Article VII are followed.

Section 4. WAIVER OF REQUIREMENT. The restrictions on transfer of shares as provided herein may be waived as to a particular transaction by the filing of a written waiver of such restriction signed by all the shareholders of the corporation with the secretary of the corporation. Such waiver shall designate the particular transaction as to which such waiver shall be effective.

Section 5. ARTICLE BINDING ON NEW SHAREHOLDER. Following any transfer as provided herein, the shares held by the transferee shall be subject to the restrictions set forth in this Article VII.

Section 6. AMENDMENT OF ARTICLE. Notwithstanding the provisions of Article VI of these bylaws, this Article VII may be amended or repealed only by the vote or written assent of shareholders holding 66.66% percent of the outstanding shares entitled to vote.

CERTIFICATE OF SECRETARY

I, the undersigned, do hereby certify that I am the duly elected and acting secretary of W.G. Zimmerman Engineering, Inc, a California corporation; and that the foregoing bylaws, comprised of 25 pages, constitute the bylaws of such corporation as duly adopted by Action of the Incorporator of the corporation duly taken on May 20, 1999. .

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of such corporation on May 27, 1999.

William G. Zimmerman, Secretary

Attachment 1

CITY OF LAWNDALE

CONTRACT SERVICES AGREEMENT FOR

ON-CALL TRAFFIC ENGINEERING SERVICES

This Contract Services Agreement ("Agreement") is made and entered into this 4th day of December, 2023, by and between the City of Lawndale, a municipal corporation ("City"), and Advantec Consulting Engineers, Inc. ("Consultant"). The term Consultant includes professionals performing in a consulting capacity. The parties hereto agree as follows:

1.0 SERVICES OF CONSULTANT

1.1 Scope of Services. In compliance with all terms and conditions of this Agreement, Consultant shall provide the work and services specified in the "Scope of Services" attached hereto as *Exhibit "A"* and incorporated herein by this reference. Consultant warrants that all work or services set forth in the Scope of Services will be performed in a competent, professional and satisfactory manner.

1.2 Consultant's Proposal. The Scope of Services shall include the Consultant's proposal or bid which shall be incorporated herein by this reference as though fully set forth herein. In the event of any inconsistency between the terms of such proposal and this Agreement, the terms of this Agreement shall govern.

1.3 Compliance with Law. All work and services rendered hereunder shall be provided in accordance with all ordinances, resolutions, statutes, rules, and regulations of the City and any Federal, State or local governmental agency having jurisdiction.

1.4 Licenses, Permits, Fees and Assessments. Consultant shall obtain at its sole cost and expense, such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement. Consultant shall have the sole obligation to pay for any fees, assessments, taxes, including applicable penalties and interest, which may be imposed by law and arise from or are necessary for the Consultant's performance of the services required by this Agreement; and shall indemnify, defend and hold harmless City against any claim for such fees, assessments, taxes, penalties or interest levied, assessed or imposed against City hereunder.

1.5 Familiarity with Work. By executing this Agreement, Consultant warrants that Consultant (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the work and services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement.

1.6 Additional Services. City shall have the right at any time during the performance of the services, without invalidating this Agreement, to order extra work beyond that specified in the Scope of Services or make changes by altering, adding to or deducting from said work. No such extra work may be undertaken unless a written order is first given by the Contract Officer to the Consultant, incorporating therein any adjustment in (i) the Contract Sum, and/or (ii) the time to perform this Agreement, which said adjustments are subject to the written approval of the Consultant. Any increase in compensation must be approved by the City Council. It is expressly understood by Consultant that the provisions of this Section shall not apply to services specifically set forth in the Scope of Services or reasonably

contemplated therein. Consultant hereby acknowledges that it accepts the risk that the services to be provided pursuant to the Scope of Services may be more costly or time consuming than Consultant anticipates and that Consultant shall not be entitled to additional compensation therefor.

1.7 Special Requirements. Additional terms and conditions of this Agreement, if any, which are made a part hereof are set forth in the "Special Requirements" attached hereto as *Exhibit "B"* and incorporated herein by this reference. In the event of a conflict between the provisions of *Exhibit "B"* and any other provisions of this Agreement, the provisions of *Exhibit "B"* shall govern.

1.8 Environmental Laws. Consultant shall comply with all applicable environmental laws, ordinances, codes and regulations of Federal, State, and local governments. Consultant shall also comply with all applicable mandatory standards and policies relating to energy efficiency.

2.0 COMPENSATION

2.1 Contract Sum. For the services rendered pursuant to this Agreement, Consultant shall be compensated in accordance with the "Fee Proposal" attached hereto as *Exhibit "C"* and incorporated herein by this reference. The method of compensation may include: (i) a lump sum payment upon completion, (ii) payment in accordance with the percentage of completion of the services, (iii) payment for time and materials based upon the Consultant's rates as specified in the Schedule of Compensation, but not exceeding the Contract Sum or (iv) such other methods as may be specified in the Schedule of Compensation. Compensation may include reimbursement for actual and necessary expenditures approved by the Contract Officer in advance if specified in the Schedule of Compensation. The Contract Sum shall include the attendance of Consultant at all project meetings reasonably deemed necessary by the City.

Consultant agrees that if Consultant becomes aware of any facts, circumstances, techniques, or events that may or will materially increase or decrease the cost of the work or services or, if Consultant is providing design services, the cost of the project being designed, Consultant shall promptly notify the Contract Officer of said fact, circumstance, technique or event and the estimated increased or decreased cost related thereto and, if Consultant is providing design services, the estimated increased or decreased cost estimate for the project being designed.

2.2 Method of Payment. Unless some other method of payment is specified in the Schedule of Compensation, in any month in which Consultant wishes to receive payment, no later than the first (1st) working day of such month, Consultant shall submit to the City, in a form approved by the City's Director of Finance, an invoice for services rendered prior to the date of the invoice. Except as provided in Section 7.2, City shall pay Consultant for all expenses stated thereon which are approved by City pursuant to this Agreement generally within thirty (30) days, and no later than forty-five (45) days, from the submission of an invoice in an approved form. City will review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement. If no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by City, the invoice will be returned by City to Consultant for correction and resubmission. City reserves the right to withhold future payment to Consultant if any aspect of the Consultant's work is found substantially inadequate.

2.3 Availability of Funds. It is mutually understood between the parties that this Agreement is valid and enforceable only if sufficient funds are made available by the City Council of the City for

the purposes of this Agreement. The availability of funding is affected by matters outside the City's control, including other governmental entities. Accordingly, the City has the option to void the whole Agreement or to amend the Agreement to reflect unanticipated reduction in funding for any reason.

3.0 PERFORMANCE SCHEDULE

3.1 Time of Essence. Time is of the essence in the performance of this Agreement.

3.2 Schedule of Performance. Consultant shall commence the services pursuant to this Agreement upon receipt of a written notice to proceed and shall perform all services within the time period(s) established in the "Schedule of Performance" attached hereto as *Exhibit "D"*, if any, and incorporated herein by this reference.

3.3 Force Majeure. The time period(s) specified in the Schedule of Performance for performance of the services rendered pursuant to this Agreement shall be extended because of any delays due to unforeseeable causes beyond the control and without the fault or negligence of the Consultant, including, but not restricted to, acts of God or of the public enemy, unusually severe weather, fires, earthquakes, floods, epidemics, quarantine restrictions, riots, strikes, freight embargoes, wars, litigation, and/or acts of any governmental agency, including the City, if the Consultant shall, within ten (10) days of the commencement of such delay, notify the Contract Officer in writing of the causes of the delay. The Contract Officer shall ascertain the facts and the extent of delay and extend the time for performing the services for the period of the enforced delay when and if, in the judgment of the Contract Officer, such delay is justified. The Contract Officer's determination shall be final and conclusive upon the parties to this Agreement. In no event shall Consultant be entitled to recover damages against the City for any delay in the performance of this Agreement, however caused; Consultant's sole remedy being extension of the Agreement pursuant to this Section.

3.4 Term. Unless earlier terminated in accordance with Section 7.4 below, this Agreement shall begin on December 5, 2023 and continue in full force and effect until completion of the services no later than December 4, 2024.

4.0 COORDINATION OF WORK

4.1 Representative of Consultant. Carlos A. Ortiz is hereby designated as being the representative of Consultant authorized to act on its behalf with respect to the work or services specified herein and to make all decisions in connection therewith.

It is expressly understood that the experience, knowledge, capability and reputation of the representative was a substantial inducement for City to enter into this Agreement. Therefore, the representative shall be responsible during the term of this Agreement for directing all activities of Consultant and devoting sufficient time to personally supervise the services hereunder. For purposes of this Agreement, the representative may not be replaced nor may his responsibilities be substantially reduced by Consultant without the express written approval of City.

4.2 Contract Officer. The City's City Manager is hereby designated as the representative of the City authorized to act in its behalf with respect to the work and services and to make all decisions in connection therewith ("Contract Officer"). It shall be the Consultant's responsibility to assure that the Contract Officer is kept informed of the progress of the performance of the services and the Consultant

shall refer any decisions which must be made by City to the Contract Officer. The City may designate another Contract Officer by providing written notice to Consultant.

4.3 Prohibition Against Subcontracting or Assignment. The experience, knowledge, capability and reputation of Consultant, its principals and employees were a substantial inducement for the City to enter into this Agreement. Therefore, Consultant shall not contract with any other entity to perform in whole or in part the services required hereunder without the express written approval of the City. In addition, neither this Agreement nor any interest herein may be transferred or assigned without the prior written approval of City. Transfers restricted hereunder shall include the transfer to any person or group of persons acting in concert of more than twenty five percent (25%) of the present ownership and/or control of Consultant taking all transfers into account on a cumulative basis. A prohibited transfer or assignment shall be void. No approved transfer shall release the Consultant or any surety of Consultant of any liability hereunder without the express consent of City.

4.4 Independent Contractor. Neither the City nor any of its employees shall have any control over the manner or means by which Consultant or employees, perform the services required herein, except as otherwise set forth herein. Consultant shall perform all services required herein as an independent contractor of City and shall remain under only such obligations as are consistent with that role. Consultant represents and warrants that the personnel used to provide services to the City pursuant to this Agreement are classified by Consultant as employees. Consultant shall not at any time or in any manner represent that it or any of its employees are employees of City. City shall not in any way or for any purpose become or be deemed to be a partner of Consultant in its business or otherwise or a joint venturer or a member of any joint enterprise with Consultant. In the event that Consultant or any employee of Consultant providing services under this Agreement claims or is determined by a federal or state agency, a court of competent jurisdiction, or the California Public Employees' Retirement System ("CalPERS") to be classified as other than an independent contractor for the City, then Consultant shall indemnify, defend, and hold harmless the City for the payment of any and all assessed fines, penalties, judgments, employee and/or employer contributions, and any other damages and costs assessed to the City as a consequence of, or in any way attributable to, the assertion that Consultant or any staff Consultant used to provide services under this Agreement are employees of the City.

5.0 INSURANCE AND INDEMNIFICATION

5.1 Insurance. Consultant shall procure and maintain, at its sole cost and expense, in a form and content satisfactory to City, during the entire term of this Agreement including any extension thereof, the following policies of insurance:

(a) Commercial General Liability Insurance. A policy of commercial general liability insurance using Insurance Services Office "Commercial General Liability" policy form CG 00 01, with an edition date prior to 2004, or the exact equivalent. Coverage for an additional insured shall not be limited to its vicarious liability. Defense costs must be paid in addition to limits. Limits shall be no less than $1,000,00.00 per occurrence for all covered losses and no less than $2,000,000.00 general aggregate.

(b) Workers' Compensation Insurance. A policy of workers' compensation insurance on a state-approved policy form providing statutory benefits as required by law with employer's liability limits no less than $1,000,000 per accident for all covered losses.

(c) Automotive Insurance. A policy of comprehensive automobile liability insurance written on a per occurrence basis in an amount not less than $1,000,000.00 per accident, combined single limit. Said policy shall include coverage for owned, non owned, leased and hired cars.

(d) Professional Liability or Error and Omissions Insurance. A policy of professional liability insurance in an amount not less than $1,000,000.00 per claim with respect to loss arising from the actions of Consultant performing professional services hereunder on behalf of the City. Any policy inception date, continuity date, or retroactive date must be before the effective date of this Agreement and Consultant agrees to maintain continuous coverage through a period no less than three (3) years after completion of the services required by this Agreement.

All of the above policies of insurance shall be primary insurance. The general liability policy shall name the City, its officers, employees and agents ("City Parties") as additional insureds and shall waive all rights of subrogation and contribution it may have against the City and the City's Parties and their respective insurers. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. All of said policies of insurance shall also provide that said insurance may be not cancelled without providing ten (10) days prior written notice by registered mail to the City. In the event any of said policies of insurance are cancelled or amended, Consultant shall, prior to the cancellation or amendment date, submit new evidence of insurance in conformance with this Section 5.1 to the Contract Officer. No work or services under this Agreement shall commence until Consultant has provided City with Certificates of Insurance or appropriate insurance binders evidencing the above insurance coverages and said Certificates of Insurance or binders are approved by City.

Consultant agrees that the provisions of this Section 5.1 shall not be construed as limiting in any way the extent to which Consultant may be held responsible for the payment of damages to any persons or property resulting from Consultant's activities or the activities of any person or persons for which Consultant is otherwise responsible. If the Consultant's insurance policies have higher limits and coverage than those required by this contract, the City will have access to those higher limits and coverage maintained by the Consultant.

The insurance required by this Agreement shall be satisfactory only if issued by companies qualified to do business in California, rated "A" or better in the most recent edition of Best Rating Guide or The Key Rating Guide, and only if they are of a financial category Class VII or better, unless such requirements are waived by the Risk Manager of the City due to unique circumstances.

In the event that the Consultant is authorized to subcontract any portion of the work or services provided pursuant to this Agreement, the contract between the Consultant and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Consultant is required to maintain pursuant to this Section 5.1.

5.2 Indemnification.

(a) Indemnity for Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, and except for the statutory limits set forth under California Civil Code Section 2782,8 applicable to services provided by a "design professional", Consultant shall indemnify, defend and hold harmless City and the City's Parties from and against any and all losses, liabilities, damages, costs and expenses, including

attorneys' fees and costs to the extent same are caused in whole or in part by any negligent or wrongful act, error or omission of Consultant, its officers, employees of subcontractors (or any entity or individual for which Consultant shall bear legal liability) in the performance of professional services under this Agreement.

(b) Indemnity for Other Than Design Professional Liability. Other than in the performance of design professional services and to the full extent permitted by law, Consultant shall indemnify, defend and hold harmless City and City's Parties from and against any liability (including liability for claims, suits, actions, losses, expenses or costs of any kind, whether actual, alleged or threatened, including attorneys' fees and costs, court costs, defense costs and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Consultant or by any individual or entity for which Consultant is legally liable, including but not limited to officers, employees or subcontractors of Consultant.

6.0 RECORDS AND REPORTS

6.1 Reports. Consultant shall periodically prepare and submit to the Contract Officer such reports concerning the performance of the services required by this Agreement as the Contract Officer shall require.

6.2 Records. Consultant shall keep, and require subcontractors to keep, such books and records as shall be necessary to perform the services required by this Agreement and enable the Contract Officer to evaluate the performance of such services. The Contract Officer shall have full and free access to such books and records at all times during normal business hours of City, including the right to inspect, copy, audit and make records and transcripts from such records. Such records shall be maintained for a period of three (3) years following completion of the services hereunder, and the City shall have access to such records in the event any audit is required.

6.3 Ownership of Documents. All drawings, specifications, reports, records, documents and other materials prepared by Consultant, its employees, and subcontractors in the performance of this Agreement shall be the property of City and shall be delivered to City upon request of the Contract Officer or upon the termination of this Agreement and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by City of its full rights of ownership of such documents and materials. Consultant may retain copies of such documents for its own use and Consultant shall have an unrestricted right to use the concepts embodied therein. All subcontractors shall provide for assignment to City of any documents or materials prepared by them, and in the event Consultant fails to secure such assignment, Consultant shall indemnify City for all damages resulting therefrom. Except as necessary for the performance of services under this Agreement, no documents prepared under this Agreement may be released by Contractor to any other person or entity without City's prior written approval. Consultant warrants that all Documents it drafts and completes pursuant to this Agreement constitute original work. Specifically, Consultant understands and agrees that use of artificial intelligence (AI) tools including, without limitation, ChatGPT, Microsoft's Bing Chat, Google's Bard, and Meta's LLaMA (Large Language Model Meta AI), in the performance of this Agreement does not constitute an original work, i.e., submitting Documents generated by such AI tools to City and representing it as Consultant's original work constitutes a material breach of this Agreement, constitutes a false claim, and may also violate applicable intellectual property right laws including, without limitation, United States Copyright Law. Accordingly, and notwithstanding any other provision of this Agreement as to ownership, City specifically rejects ownership of such Documents. Consultant

is required to indemnify and defend City to the fullest extent allowed by applicable law should it violate this Section.

6.4 Confidentiality of Information. All information gained or work product produced by Contractor in performance of this Agreement will be considered confidential, unless such information is in the public domain or already known to Contractor. Contractor may not release or disclose any such information or work product to persons or entities other than City without prior written authorization from the City Manager, except as may be required by law. Contractor, its officers, employees, or agents, may not, without prior written authorization from the City Manager or unless requested by the City Attorney of City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the services performed under this Agreement. Response to a subpoena or court order will not be considered "voluntary" provided Contractor gives City notice of such court order or subpoena. If Contractor, or any officer, employee, or agent of Contractor, provides any information or work product in violation of this Agreement, then City will have the right to reimbursement and indemnity from Contractor for any damages, costs and fees, including attorney's fees, caused by or incurred as a result of Contractor's conduct. Contractor must promptly notify City should Contractor, its officers, employees, or agents be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. City retains the right, but has no obligation, to represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Contractor. However, this right to review any such response does not imply or mean the right by City to control, direct, or rewrite such response. All media and press releases, including graphic display information, must be approved and distributed solely by City, unless otherwise agreed to in writing by City. All media interviews regarding the performance of services under this Agreement are prohibited unless expressly authorized by City.

7.0 ENFORCEMENT OF AGREEMENT

7.1 California Law. This Agreement shall be construed and interpreted both as to validity and to performance of the parties in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in relation to this Agreement shall be instituted in the Superior Court of the County of Los Angeles, State of California, or any other appropriate court in such county, and Consultant agrees to submit to the personal jurisdiction of such court in the event of such action.

7.2 Retention of Funds. Consultant hereby authorizes City to deduct from any amount payable to Consultant (whether or not arising out of this Agreement) (i) any amounts the payment of which may be in dispute hereunder or which are necessary to compensate City for any losses, costs, liabilities, or damages suffered by City, and (ii) all amounts for which City may be liable to third parties, by reason of Consultant's acts or omissions in performing or failing to perform Consultant's obligation under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by Consultant, City may withhold from any payment due, without liability for interest because of such withholding, an amount sufficient to cover such claim. The failure of City to exercise such right to deduct or to withhold shall not, however, affect the obligations of the Consultant to insure, indemnify, and protect City as elsewhere provided herein.

7.3 Waiver. No delay or omission in the exercise of any right or remedy by a non-defaulting party on any default shall impair such right or remedy or be construed as a waiver. A party's consent to or approval of any act by the other party requiring the party's consent or approval shall not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Agreement.

7.4 Termination Prior to Expiration of Term. Either party may terminate this Agreement at any time, with or without cause, upon thirty (30) days' written notice to the other party. Upon receipt of any notice of termination, Consultant shall immediately cease all work or services hereunder except such as may be specifically approved by the Contract Officer. Consultant shall be entitled to compensation for the reasonable value of the work product actually produced prior to the effective date of the notice of termination and for any services authorized by the Contract Officer thereafter in accordance with the Schedule of Compensation and City shall be entitled to reimbursement for any compensation paid in excess of the services rendered.

7.5 Completion of Work After Termination for Default of Consultant. If termination is due to the failure of the Consultant to fulfill its obligations under this Agreement, City may, after compliance with the provisions of Section 7.2, take over the work and prosecute the same to completion by contract or otherwise, and the Consultant shall be liable to the extent that the total cost for completion of the services required hereunder exceeds the compensation herein stipulated (provided that the City shall use reasonable efforts to mitigate such damages), and City may withhold any payments to the Consultant for the purpose of set-off or partial payment of the amounts owed the City as previously stated.

7.6 Attorneys' Fees. If either party to this Agreement is required to initiate or defend or made a party to any action or proceeding in any way connected with this Agreement, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, shall be entitled to reasonable attorneys' fees, whether or not the matter proceeds to judgment, and to all other reasonable costs for investigating such action, taking depositions and discovery, including all other necessary costs the court allows which are incurred in such litigation.

8.0 CITY OFFICERS AND EMPLOYEES: NON-DISCRIMINATION

8.1 Non-liability of City Officers and Employees. No officer or employee of the City shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Consultant or to its successor, or for breach of any obligation of the terms of this Agreement.

8.2 Conflict of Interest; City. No officer or employee of the City shall have any financial interest in this Agreement nor shall any such officer or employee participate in any decision relating to the Agreement which affects his financial interest or the financial interest of any corporation, partnership or association in which he is interested, in violation of any State statute or regulation.

8.3 Conflict of Interest; Consultant. Consultant warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Agreement. Consultant shall comply with all conflict of interest laws and regulations including, without limitation, City's Conflict of Interest Code which is on file in the City Clerk's office. Accordingly, should the City Manager determine that Consultant will be performing a specialized or general service for the City and

there is substantial likelihood that the Consultant's work product will be presented, either written or orally, for the purpose of influencing a governmental decision, the Consultant and its officers, or employees, as applicable, shall be subject to the City's Conflict of Interest Code.

8.4 Covenant Against Discrimination. Consultant covenants that, by and for itself, its executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin, or ancestry in the performance of this Agreement. Consultant shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, national origin or ancestry.

9.0 MISCELLANEOUS PROVISIONS

9.1 Notice. Any notice or other communication either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class mail, in the case of the City, to the City Manager and to the attention of the Contract Officer, City of Lawndale, 14717 Burin Avenue, Lawndale, California 90260, and in the case of the Consultant, to the person at the address designated on the execution page of this Agreement. Either party may change its address by notifying the other party of the change of address in writing. Notice shall be deemed communicated at the time personally delivered or in seventy-two (72) hours from the time of mailing if mailed as provided in this Section.

9.2 Interpretation. The terms of this Agreement shall be construed in accordance with the meaning of the language used and shall not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction which might otherwise apply.

9.3 Integration; Amendment. It is understood that there are no oral agreements between the parties hereto affecting this Agreement and this Agreement supersedes and cancels any and all previous negotiations, agreements and understandings, if any, between the parties, and none shall be used to interpret this Agreement. This Agreement may be amended at any time by an instrument in writing signed by both parties.

9.4 Severability. Should a portion of this Agreement be declared invalid or unenforceable by a judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining portions of this Agreement which are hereby declared as severable and shall be interpreted to carry out the intent of the parties unless the invalid provision is so material that its invalidity deprives either party of the basic benefit of their bargain or renders this Agreement meaningless.

9.5 Corporate Authority. The persons executing this Agreement on behalf of the parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement, such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which said party is bound. This Agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties.

9.6 Counterparts. This Agreement may be executed in several counterparts, each of which will constitute one and the same instrument and will become binding upon the parties when at least one copy has been signed by both parties. This Agreement and any amendment will be considered executed when the signature page of a party is delivered by facsimile or other electronic transmission. Such electronic signatures will have the same effect as an original signature, provided that a wet signature copy is also mailed to the other party.

9.7 Modification of Agreement. No amendment to or modification of this Agreement will be valid unless made in writing and approved by Consultant and by the City Council or City Manager, as applicable. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.

[SIGNATURES ON FOLLOWING PAGE]

Attachment 1

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

CITY:
CITY OF LAWNDALE,
a municipal corporation

By: _____
Robert Pullen -Miles, Mayor

ATTEST:

_____
Erica Harbison, City Clerk

APPROVED AS TO FORM:
Burke Williams & Sorensen, LLP

_____
Gregory M. Murphy, City Attorney

CONSULTANT:
Advantec Consulting Engineers, Inc.
a [California corporation]

By: _____
Name: Carlos A. Ortiz
Title: Chief Executive Officer

By: _____ Pauline Yip, Corporate Secretary signed on behalf of Leo Lee
Name: Leo Lee
Title: Chairman

Address: 1200 Roosevelt Suite 350
Irvine, CA 92620

EXHIBIT "A"

SCOPE OF SERVICES

Provide on-call Traffic Engineering services to conduct field data collection and prepare engineering and traffic surveys in accordance with state law. The following services are specifically requested:

1. **Traffic signal design**
2. **Signing and striping design**
3. **Worksite traffic control design**
4. **Traffic calming design**
5. **Parking studies**
6. **School-related operations**
7. **ITS and communication design**
8. **Plan review services**
9. **Traffic study review**
10. **Conceptual design of roundabouts and similar improvements**
11. **Engineering and traffic surveys**
12. **Collision trend analysis and other safety studies**

EXHIBIT "B"

SPECIAL REQUIREMENTS

A new Section 2.4 is added to the Agreement to read as follows:

"2.4 Prevailing Wages; Indemnification. Consultant and all subcontractors shall comply with the State Labor standards. State Labor standards provisions, including prevailing wage requirements, will be enforced such that the general rate of per diem wages (prevailing wage) shall be paid for each craft, classification, or type of worker needed to execute the contract to all workers employed in the execution of the contract for the work to be performed by Advantec Consulting Engineers, Inc. The State General Prevailing Wage Determination is as established by the California Department of Industrial Relations for Los Angeles County. *(Refer to http://www.dir.ca.gov/OPRL/PWD/Determinations/Statewide/C-TT.pdf for additional information.)* The prevailing rate of per diem wages are on file at the City of Lawndale Department of Public Works, 4722 Manhattan Beach Boulevard, Lawndale, California 90266, and are available to any interested party on request. The statutory provisions for penalties for failure to pay prevailing wages and/or failure to otherwise comply with state's wage and hour laws will be enforced. The Consultant is required to post at the job site the prevailing rate of per diem wages and other notices prescribed by regulation.

The Consultant and all subcontractors must submit electronic certified payroll records weekly directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) no less than monthly and must comply with all statutory requirements relating to certified copies of payroll records, including the maintenance of the records, their certification, and their availability for inspection as required by Labor Code Section 1776 and as required under Subsection 7-2.6 of said Standard Specifications for Public Works Construction.

Consultant shall indemnify, defend with legal counsel approved by the City, and hold the City and City's Parties harmless from and against any all liability, loss, damage, costs, or expenses (including attorneys' fees and court costs) arising from or as a result of any action, claim, or determination relating in any way to the failure to properly pay of prevailing wages. Moreover, the City retains the right to settle or abandon any such the matter without the Consultant's consent as to the City's liabilities or rights only."

- A new Section 5.1(e) is added to the Agreement to read as follows:

(e) Cyber Liability Insurance. The cyber liability insurance must include the following coverage:

- Liability arising from the theft, dissemination and/or use of confidential or personally identifiable information; including credit monitoring and regulatory fines arising from such theft, dissemination or use of the confidential information.

- Network security liability arising from the unauthorized use of, access to, or tampering with computer systems.
- Liability arising from the failure of technology products (software) required under the Agreement for Contractor to properly perform the services intended.
- Electronic media liability arising from personal injury, plagiarism or misappropriation of ideas, domain name infringement or improper deep-linking or framing, and infringement or violation of intellectual property rights.
- Liability arising from the failure to render professional services

If coverage is maintained on a "claims-made" basis, Contractor must maintain such coverage for an additional period of three years following termination of the Agreement.

EXHIBIT "C"

SCHEDULE OF COMPENSATION

SECTION 5: FEE PROPOSAL

5.1 RATE SCHEDULE

The following summarizes ADVANTEC hour rates and direct costs that will be for tasks and projects to provide On-Call Traffic Services. These services are effective January 2023.

Hourly Rates
Effective January 2023

Classification	Rate
Project Director	$350 / hour
Senior Project Manager VIII	$290 / hour
Senior Project Manager VII	$250 / hour
Project Manager/ Senior Engineer VI	$220 / hour
Project Manager/ Engineer V-3	$195 / hour
Project Manager/ Engineer V-2	$175 / hour
Project Manager/ Engineer V-1	$155 / hour
Associate Engineer IV	$140 / hour
Associate Engineer III	$130 / hour
Assistant Engineer II	$120 / hour
Assistant Engineer I	$110 / hour
Administrative III	$130 / hour
Administrative II	$110 / hour
Administrative I	$ 90 / hour

Attachment 1

EXHIBIT "D"

SCHEDULE OF PERFORMANCE

Not applicable

ACTION TAKEN BY WRITTEN CONSENT
IN LIEU OF THE ANNUAL MEETING OF
SHAREHOLDERS & DIRECTORS

ADVANTEC CONSULTING ENGINEERS INC.

A CALIFORNIA CORPORATION

We, the undersigned, being the SHAREHOLDERS, of **ADVANTEC CONSULTING ENGINEERS INC.**, (the "Corporation"), held the meeting at 1200 Roosevelt, Irvine, CA 92620, on the 1st July 2022 at 11:00 in the morning of said day. We hereby consent to the adoption of the following recitals and resolutions by written consent pursuant to Section 307(b) of the California Corporation Code and the Bylaws of the Corporation.

ATTENDANCE OF SHAREHOLDERS

LEO K LEE
CARLOS ORTIZ
PAULINE YIP

ELECTION OF TEMPORARY CHARIMAN AND SECRETARY

The meeting was called to order by Mr. LEO LEE. On motion and by unanimous vote, Mr. LEO LEE was selected as Temporary Chairman and Temporary Secretary.

APPOINTMENT OF CHAIRMAN, CHIEF EXECUTIVE OFFICER AND SECRETARY

Upon motion duly made, seconded, and unanimously carried, it was,

RESOLVED, that the Shareholders hereby ratify, approve, and confirm the following actions effective 1ST JULY 2022:

LEO LEE is appointed as the CHAIRMAN and resigned Chief Executive Officer. Leo Lee demonstrates the legal authority of the signature to bind any project related documents of the Corporation and any financial documents of the Corporation.

CARLOS A ORTIZ is appointed as the CHIEF EXECUTIVE OFFICER and resigned Chief Operating Officer. Carlos A Ortiz demonstrates the legal authority of the signature to bind any project related documents of the Corporation.

PAULINE YIP is appointed as the CORPORATE SECRETARY and BOARD MEMBER. She demonstrates the legal authority of the signature to bind any project related documents of the Corporation.

RATIFICATION OF GENERAL CORPORATE TRANSACTIONS

WHEREAS, the members of the Board of Directors have reviewed those certain actions taken by the officers on behalf of the Corporation during the past fiscal year; and

WHEREAS, it has been deemed advisable and in the best interest of the Corporation for the Board to ratify said transaction and to approve those certain actions taken by the officers, on behalf of the Corporation.

RESOLVED, that the acts of the officers, taken on behalf of the Corporation during the past fiscal year, are and they hereby are ratified, approved and confirmed.

RESOLVED FURTHER, that the officers of the Corporation be and they hereby are authorized and directed to take such actions as may be appropriate or necessary to carry out the above resolutions and the transactions ratified above.

The above-described action was taken without a meeting pursuant to the written consent to the Board of Directors of the Corporation as evidenced by the signatures appearing below, and such consent is executed pursuant to the powers given to the Board of Directors in the Bylaws of the Corporation, effective on 1st July 2022.

Leo Lee, Chairman

Pauline Yip, Secretary

Attachment 1

CITY OF LAWNDALE

CONTRACT SERVICES AGREEMENT FOR

ON-CALL TRAFFIC ENGINEERING SERVICES

This Contract Services Agreement ("Agreement") is made and entered into this 4th day of December, 2023, by and between the City of Lawndale, a municipal corporation ("City"), and Transtech Engineers, Inc. ("Consultant"). The term Consultant includes professionals performing in a consulting capacity. The parties hereto agree as follows:

1.0 SERVICES OF CONSULTANT

1.1 Scope of Services. In compliance with all terms and conditions of this Agreement, Consultant shall provide the work and services specified in the "Scope of Services" attached hereto as *Exhibit "A"* and incorporated herein by this reference. Consultant represents that all work or services set forth in the Scope of Services will be performed in a competent and professional manner consistent with the level of skill and care ordinarily exercised by members of Consultant's profession providing the same or similar services under similar circumstances ("the Standard of Care").

1.2 Consultant's Proposal. The Scope of Services shall include the Consultant's proposal or bid which shall be incorporated herein by this reference as though fully set forth herein. In the event of any inconsistency between the terms of such proposal and this Agreement, the terms of this Agreement shall govern.

1.3 Compliance with Law. All work and services rendered hereunder shall be provided in accordance with all applicable ordinances, resolutions, statutes, rules, and regulations of the City and any Federal, State or local governmental agency having jurisdiction.

1.4 Licenses, Permits, Fees and Assessments. Consultant shall obtain at its sole cost and expense, such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement. Consultant shall have the sole obligation to pay for any fees, assessments, taxes, including applicable penalties and interest, which may be imposed by law and arise from or are necessary for the Consultant's performance of the services required by this Agreement; and shall indemnify, defend and hold harmless City against any claim for such fees, assessments, taxes, penalties or interest levied, assessed or imposed against City hereunder.

1.5 Familiarity with Work. By executing this Agreement, Consultant represents that Consultant (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the work and services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement.

1.6 Additional Services. City shall have the right at any time during the performance of the services, without invalidating this Agreement, to order extra work beyond that specified in the Scope of Services or make changes by altering, adding to or deducting from said work. No such extra work may be undertaken unless a written order is first given by the Contract Officer to the Consultant, incorporating therein any adjustment in (i) the Contract Sum, and/or (ii) the time to perform this Agreement, which said adjustments are subject to the written approval of the Consultant. Any increase in compensation

must be approved by the City Council. It is expressly understood by Consultant that the provisions of this Section shall not apply to services specifically set forth in the Scope of Services or reasonably contemplated therein. Consultant hereby acknowledges that it accepts the risk that the services to be provided pursuant to the Scope of Services may be more costly or time consuming than Consultant anticipates and that Consultant shall not be entitled to additional compensation therefor.

1.7 Special Requirements. Additional terms and conditions of this Agreement, if any, which are made a part hereof are set forth in the "Special Requirements" attached hereto as *Exhibit "B"* and incorporated herein by this reference. In the event of a conflict between the provisions of *Exhibit "B"* and any other provisions of this Agreement, the provisions of *Exhibit "B"* shall govern.

1.8 Environmental Laws. Consultant shall comply with all applicable environmental laws, ordinances, codes and regulations of Federal, State, and local governments. Consultant shall also comply with all applicable mandatory standards and policies relating to energy efficiency.

2.0 COMPENSATION

2.1 Contract Sum. For the services rendered pursuant to this Agreement, Consultant shall be compensated in accordance with the "Fee Proposal" attached hereto as *Exhibit "C"* and incorporated herein by this reference. The method of compensation may include: (i) a lump sum payment upon completion, (ii) payment in accordance with the percentage of completion of the services, (iii) payment for time and materials based upon the Consultant's rates as specified in the Schedule of Compensation, but not exceeding the Contract Sum or (iv) such other methods as may be specified in the Schedule of Compensation. Compensation may include reimbursement for actual and necessary expenditures approved by the Contract Officer in advance if specified in the Schedule of Compensation. The Contract Sum shall include the attendance of Consultant at all project meetings reasonably deemed necessary by the City.

Consultant agrees that if Consultant becomes aware of any facts, circumstances, techniques, or events that may or will materially increase or decrease the cost of the work or services or, if Consultant is providing design services, the cost of the project being designed, Consultant shall promptly notify the Contract Officer of said fact, circumstance, technique or event and the estimated increased or decreased cost related thereto and, if Consultant is providing design services, the estimated increased or decreased cost estimate for the project being designed.

2.2 Method of Payment. Unless some other method of payment is specified in the Schedule of Compensation, in any month in which Consultant wishes to receive payment, no later than the first (1st) working day of such month, Consultant shall submit to the City, in a form approved by the City's Director of Finance, an invoice for services rendered prior to the date of the invoice. Except as provided in Section 7.2, City shall pay Consultant for all expenses stated thereon which are approved by City pursuant to this Agreement generally within thirty (30) days, and no later than forty-five (45) days, from the submission of an invoice in an approved form. City will review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement. If no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by City, the invoice will be returned by City to Consultant for correction and resubmission. City reserves the right to withhold future payment to Consultant if any aspect of the Consultant's work is found substantially inadequate.

2.3 Availability of Funds. It is mutually understood between the parties that this Agreement is valid and enforceable only if sufficient funds are made available by the City Council of the City for the purposes of this Agreement. The availability of funding is affected by matters outside the City's control, including other governmental entities. Accordingly, the City has the option to void the whole Agreement or to amend the Agreement to reflect unanticipated reduction in funding for any reason.

3.0 PERFORMANCE SCHEDULE

3.1 Time of Essence. Time is of the essence in the performance of this Agreement.

3.2 Schedule of Performance. Consultant shall commence the services pursuant to this Agreement upon receipt of a written notice to proceed and shall perform all services within the time period(s) established in the "Schedule of Performance" attached hereto as *Exhibit "D"*, if any, and incorporated herein by this reference.

3.3 Force Majeure. The time period(s) specified in the Schedule of Performance for performance of the services rendered pursuant to this Agreement shall be extended because of any delays due to unforeseeable causes beyond the control and without the fault or negligence of the Consultant, including, but not restricted to, acts of God or of the public enemy, unusually severe weather, fires, earthquakes, floods, epidemics, quarantine restrictions, riots, strikes, freight embargoes, wars, litigation, and/or acts of any governmental agency, including the City, if the Consultant shall, within ten (10) days of the discovery of such delay, notify the Contract Officer in writing of the causes of the delay. The Contract Officer shall ascertain the facts and the extent of delay and extend the time for performing the services for the period of the enforced delay when and if, in the judgment of the Contract Officer, such delay is justified. The Contract Officer's determination shall be final and conclusive upon the parties to this Agreement. In no event shall Consultant be entitled to recover damages against the City for any delay in the performance of this Agreement, however caused; Consultant's sole remedy being extension of the Agreement pursuant to this Section.

3.4 Term. Unless earlier terminated in accordance with Section 7.4 below, this Agreement shall begin on December 5, 2023 and continue in full force and effect until completion of the services no later than December 4, 2024.

4.0 COORDINATION OF WORK

4.1 Representative of Consultant. Ali Cayir is hereby designated as being the representative of Consultant authorized to act on its behalf with respect to the work or services specified herein and to make all decisions in connection therewith.

It is expressly understood that the experience, knowledge, capability and reputation of the representative was a substantial inducement for City to enter into this Agreement. Therefore, the representative shall be responsible during the term of this Agreement for directing all activities of Consultant and devoting sufficient time to personally supervise the services hereunder. For purposes of this Agreement, the representative may not be replaced nor may his responsibilities be substantially reduced by Consultant without the express written approval of City.

4.2 Contract Officer. The City's City Manager is hereby designated as the representative of the City authorized to act in its behalf with respect to the work and services and to make all decisions in connection therewith ("Contract Officer"). It shall be the Consultant's responsibility to assure that the

Contract Officer is kept informed of the progress of the performance of the services and the Consultant shall refer any decisions which must be made by City to the Contract Officer. The City may designate another Contract Officer by providing written notice to Consultant.

4.3 Prohibition Against Subcontracting or Assignment. The experience, knowledge, capability and reputation of Consultant, its principals and employees were a substantial inducement for the City to enter into this Agreement. Therefore, Consultant shall not contract with any other entity to perform in whole or in part the services required hereunder without the express written approval of the City. In addition, neither this Agreement nor any interest herein may be transferred or assigned without the prior written approval of City. Transfers restricted hereunder shall include the transfer to any person or group of persons acting in concert of more than twenty five percent (25%) of the present ownership and/or control of Consultant taking all transfers into account on a cumulative basis. A prohibited transfer or assignment shall be void. No approved transfer shall release the Consultant or any surety of Consultant of any liability hereunder without the express consent of City.

4.4 Independent Contractor. Neither the City nor any of its employees shall have any control over the manner or means by which Consultant or employees, perform the services required herein, except as otherwise set forth herein. Consultant shall perform all services required herein as an independent contractor of City and shall remain under only such obligations as are consistent with that role. Consultant represents and warrants that the personnel used to provide services to the City pursuant to this Agreement are classified by Consultant as employees. Consultant shall not at any time or in any manner represent that it or any of its employees are employees of City. City shall not in any way or for any purpose become or be deemed to be a partner of Consultant in its business or otherwise or a joint venturer or a member of any joint enterprise with Consultant. In the event that Consultant or any employee of Consultant providing services under this Agreement claims or is determined by a federal or state agency, a court of competent jurisdiction, or the California Public Employees' Retirement System ("CalPERS") to be classified as other than an independent contractor for the City, then Consultant shall indemnify, defend, and hold harmless the City for the payment of any and all assessed fines, penalties, judgments, employee and/or employer contributions, and any other damages and costs assessed to the City as a consequence of, or in any way attributable to, the assertion that Consultant or any staff Consultant used to provide services under this Agreement are employees of the City.

5.0 INSURANCE AND INDEMNIFICATION

5.1 Insurance. Consultant shall procure and maintain, at its sole cost and expense, in a form and content satisfactory to City, during the entire term of this Agreement including any extension thereof, the following policies of insurance:

(a) Commercial General Liability Insurance. A policy of commercial general liability insurance using Insurance Services Office "Commercial General Liability" policy form CG 00 01, with an edition date prior to 2004, or the exact equivalent. Coverage for an additional insured shall not be limited to its vicarious liability. Defense costs must be paid in addition to limits. Limits shall be no less than $1,000,00.00 per occurrence for all covered losses and no less than $2,000,000.00 general aggregate.

(b) Workers' Compensation Insurance. A policy of workers' compensation insurance on a state-approved policy form providing statutory benefits as required by law with employer's liability limits no less than $1,000,000 per accident for all covered losses.

(c) Automotive Insurance. A policy of comprehensive automobile liability insurance written on a per occurrence basis in an amount not less than $1,000,000.00 per accident, combined single limit. Said policy shall include coverage for owned, non owned, leased and hired cars.

(d) Professional Liability or Error and Omissions Insurance. A policy of professional liability insurance in an amount not less than $1,000,000.00 per claim with respect to loss arising from the negligent actions of Consultant performing professional services hereunder on behalf of the City. Any policy inception date, continuity date, or retroactive date must be before the effective date of this Agreement and Consultant agrees to maintain continuous coverage through a period no less than three (3) years after completion of the services required by this Agreement.

All of the above policies of insurance (except for professional liability) shall be primary insurance. The general liability policy shall name the City, its officers, employees and agents ("City Parties") as additional insureds and shall waive all rights of subrogation and contribution it may have against the City and the City's Parties and their respective insurers. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. All of said policies of insurance shall also provide that said insurance may be not cancelled without providing ten (10) days prior written notice by registered mail to the City. In the event any of said policies of insurance are cancelled or amended, Consultant shall, prior to the cancellation or amendment date, submit new evidence of insurance in conformance with this Section 5.1 to the Contract Officer. No work or services under this Agreement shall commence until Consultant has provided City with Certificates of Insurance or appropriate insurance binders evidencing the above insurance coverages and said Certificates of Insurance or binders are approved by City.

Consultant agrees that the provisions of this Section 5.1 shall not be construed as limiting in any way the extent to which Consultant may be held responsible for the payment of damages to any persons or property resulting from Consultant's activities or the activities of any person or persons for which Consultant is otherwise responsible. If the Consultant's insurance policies have higher limits and coverage than those required by this contract, the City will have access to those higher limits and coverage maintained by the Consultant.

The insurance required by this Agreement shall be satisfactory only if issued by companies qualified to do business in California, rated "A" or better in the most recent edition of Best Rating Guide or The Key Rating Guide, and only if they are of a financial category Class VII or better, unless such requirements are waived by the Risk Manager of the City due to unique circumstances.

In the event that the Consultant is authorized to subcontract any portion of the work or services provided pursuant to this Agreement, the contract between the Consultant and such subcontractor shall require the subcontractor to maintain the same policies of insurance that the Consultant is required to maintain pursuant to this Section 5.1.

5.2 Indemnification.

(a) Indemnity for Design Professional Liability. When the law establishes a professional standard of care for Consultant's services, to the fullest extent permitted by law, and except for the statutory limits set forth under California Civil Code Section 2782-8 applicable to services provided by a "design professional", Consultant shall indemnify and hold harmless City and the City's Parties from and against any and all losses, liabilities, damages, costs and expenses, including reasonable

attorneys' fees and costs to the extent same are caused in whole or in part by any negligence, recklessness, or willful misconduct of Consultant, its officers, employees of subcontractors (or any entity or individual for which Consultant shall bear legal liability) in the performance of professional services under this Agreement. Consultant shall not have an upfront duty to defend City or City's Parties but shall reimburse reasonable defense fees and costs to the extent they are determined to have been caused by the negligence, recklessness, or willful misconduct of Consultant, or as the parties otherwise agree in settlement. In no event shall the cost to defend charged to the Consultant under this paragraph exceed the Consultant's proportionate percentage of fault.

(b) Indemnity for Other Than Design Professional Liability. Other than in the performance of design professional services and to the full extent permitted by law, Consultant shall indemnify, defend and hold harmless City and City's Parties from and against any liability (including liability for claims, suits, actions, losses, expenses or costs of any kind, whether actual, alleged or threatened, fees and costs, court costs, defense costs and expert witness fees), of this Agreement by Consultant or by any individual or entity for which Consultant is legally liable, including but not limited to officers, employees or subcontractors of Consultant.

6.0 RECORDS AND REPORTS

6.1 Reports. Consultant shall periodically prepare and submit to the Contract Officer such reports concerning the performance of the services required by this Agreement as the Contract Officer shall require.

6.2 Records. Consultant shall keep, and require subcontractors to keep, such books and records as shall be necessary to perform the services required by this Agreement and enable the Contract Officer to evaluate the performance of such services. The Contract Officer shall have full and free access to such books and records at all times during normal business hours of City, including the right to inspect, copy, audit and make records and transcripts from such records. Such records shall be maintained for a period of three (3) years following completion of the services hereunder, and the City shall have access to such records in the event any audit is required.

6.3 Ownership of Documents. All drawings, specifications, reports, records, documents and other materials prepared by Consultant, its employees, and subcontractors in the performance of this Agreement shall be the property of City and shall be delivered to City upon request of the Contract Officer or upon the termination of this Agreement and Consultant shall have no claim for further employment or additional compensation as a result of the exercise by City of its full rights of ownership of such documents and materials. Any use, modification, or reuse of such documents and materials for other projects without specific written authorization by the Consultant will be at the City's sole risk and without liability to Consultant. Consultant may retain copies of such documents for its own use and Consultant shall have an unrestricted right to use the concepts embodied therein. All subcontractors shall provide for assignment to City of any documents or materials prepared by them, and in the event Consultant fails to secure such assignment, Consultant shall indemnify City for all damages resulting therefrom. Except as necessary for the performance of services under this Agreement, no documents prepared under this Agreement may be released by Consultant to any other person or entity without City's prior written approval. Consultant represents that all Documents it drafts and completes pursuant to this Agreement constitute original work. Specifically, Consultant understands and agrees that use of artificial intelligence (AI) tools including, without limitation, ChatGPT, Microsoft's Bing Chat, Google's Bard, and Meta's LLaMA (Large Language Model Meta AI), in the performance of this

Agreement does not constitute an original work, i.e., submitting Documents generated by such AI tools to City and representing it as Consultant's original work constitutes a material breach of this Agreement, constitutes a false claim, and may also violate applicable intellectual property right laws including, without limitation, United States Copyright Law. Accordingly, and notwithstanding any other provision of this Agreement as to ownership, City specifically rejects ownership of such Documents. Consultant is required to indemnify and defend City to the fullest extent allowed by applicable law should it violate this Section.

6.4 Confidentiality of Information. All information gained or work product produced by Consultant in performance of this Agreement will be considered confidential, unless such information is in the public domain or already known to Consultant. Consultant may not release or disclose any such information or work product to persons or entities other than City without prior written authorization from the City Manager, except as may be required by law. Consultant, its officers, employees, or agents, may not, without prior written authorization from the City Manager or unless requested by the City Attorney of City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the services performed under this Agreement. Response to a subpoena or court order will not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena. If Consultant, or any officer, employee, or agent of Consultant, provides any information or work product in violation of this Agreement, then City will have the right to reimbursement and indemnity from Consultant for any damages, costs and fees, including attorney's fees, caused by or incurred as a result of Consultant's conduct. Consultant must promptly notify City should Consultant, its officers, employees, or agents be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. City retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Consultant. However, this right to review any such response does not imply or mean the right by City to control, direct, or rewrite such response. All media and press releases, including graphic display information, must be approved and distributed solely by City, unless otherwise agreed to in writing by City. All media interviews regarding the performance of services under this Agreement are prohibited unless expressly authorized by City.

7.0 ENFORCEMENT OF AGREEMENT

7.1 California Law. This Agreement shall be construed and interpreted both as to validity and to performance of the parties in accordance with the laws of the State of California. Legal actions concerning any dispute, claim or matter arising out of or in relation to this Agreement shall be instituted in the Superior Court of the County of Los Angeles, State of California, or any other appropriate court in such county, and Consultant agrees to submit to the personal jurisdiction of such court in the event of such action.

7.2 Retention of Funds. Consultant hereby authorizes City to deduct from any amount payable to Consultant (whether or not arising out of this Agreement) (i) any amounts the payment of which may be in dispute hereunder or which are necessary to compensate City for any losses, costs, liabilities, or damages suffered by City, and (ii) all amounts for which City may be liable to third parties, by reason of omissions in performing or failing to perform Consultant's obligation under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by

Consultant, City may withhold from any payment due, without liability for interest because of such withholding, an amount sufficient to cover such claim. The failure of City to exercise such right to deduct or to withhold shall not, however, affect the obligations of the Consultant to insure, indemnify, and protect City as elsewhere provided herein.

7.3 Waiver. No delay or omission in the exercise of any right or remedy by a non-defaulting party on any default shall impair such right or remedy or be construed as a waiver. A party's consent to or approval of any act by the other party requiring the party's consent or approval shall not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and shall not be a waiver of any other default concerning the same or any other provision of this Agreement.

7.4 Termination Prior to Expiration of Term. Either party may terminate this Agreement at any time, with or without cause, upon thirty (30) days' written notice to the other party. Upon receipt of any notice of termination, Consultant shall immediately cease all work or services hereunder except such as may be specifically approved by the Contract Officer. Consultant shall be entitled to compensation for the reasonable value of the services performed and work product actually produced prior to the effective date of the notice of termination and for any services authorized by the Contract Officer thereafter in accordance with the Schedule of Compensation and City shall be entitled to reimbursement for any compensation paid in excess of the services rendered.

7.5 Completion of Work After Termination for Default of Consultant. If termination is due to the failure of the Consultant to fulfill its obligations under this Agreement, City may, after compliance with the provisions of Section 7.2, take over the work and prosecute the same to completion by contract or otherwise, and the Consultant shall be liable to the extent that the total cost for completion of the services required hereunder exceeds the compensation herein stipulated (provided that the City shall use reasonable efforts to mitigate such damages), and City may withhold any payments to the Consultant for the purpose of set-off or partial payment of the amounts owed the City as previously stated.

7.6 Attorneys' Fees. If either party to this Agreement is required to initiate or defend or made a party to any action or proceeding in any way connected with this Agreement, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, shall be entitled to reasonable attorneys' fees, whether or not the matter proceeds to judgment, and to all other reasonable costs for investigating such action, taking depositions and discovery, including all other necessary costs the court allows which are incurred in such litigation.

8.0 CITY OFFICERS AND EMPLOYEES: NON-DISCRIMINATION

8.1 Non-liability of Officers and Employees. No officer or employee of the City shall be personally liable to the Consultant, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Consultant or to its successor, or for breach of any obligation of the terms of this Agreement. Similarly, it is intended that the Consultant's services in connection with this Agreement shall not subject the Consultant's individual employees, officers or directors to any personal legal exposure for the risks associated with this Agreement. Therefore, and notwithstanding anything to the contrary contained herein, the City agrees that as the sole and exclusive remedy against the Consultant for any claim, demand or suit shall be directed and/or asserted only against the Consultant, the business entity to this Agreement, and not against any of the Consultant's individual

shareholders, members, employees, officers or directors, except for acts of fraud or willful misconduct or as otherwise prohibited by law.

8.2 Conflict of Interest; City. No officer or employee of the City shall have any financial interest in this Agreement nor shall any such officer or employee participate in any decision relating to the Agreement which affects his financial interest or the financial interest of any corporation, partnership or association in which he is interested, in violation of any State statute or regulation.

8.3 Conflict of Interest; Consultant. Consultant warrants that it has not paid or given and will not pay or give any third party any money or other consideration for obtaining this Agreement. Consultant shall comply with all conflict of interest laws and regulations including, without limitation, City's Conflict of Interest Code which is on file in the City Clerk's office. Accordingly, should the City Manager determine that Consultant will be performing a specialized or general service for the City and there is substantial likelihood that the Consultant's work product will be presented, either written or orally, for the purpose of influencing a governmental decision, the Consultant and its officers, or employees, as applicable, shall be subject to the City's Conflict of Interest Code.

8.4 Covenant Against Discrimination. Consultant covenants that, by and for itself, its executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, national origin, or ancestry in the performance of this Agreement. Consultant shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, national origin or ancestry.

9.0 MISCELLANEOUS PROVISIONS

9.1 Notice. Any notice or other communication either party desires or is required to give to the other party or any other person shall be in writing and either served personally or sent by prepaid, first-class mail, in the case of the City, to the City Manager and to the attention of the Contract Officer, City of Lawndale, 14717 Burin Avenue, Lawndale, California 90260, and in the case of the Consultant, to the person at the address designated on the execution page of this Agreement. Either party may change its address by notifying the other party of the change of address in writing. Notice shall be deemed communicated at the time personally delivered or in seventy-two (72) hours from the time of mailing if mailed as provided in this Section.

9.2 Interpretation. The terms of this Agreement shall be construed in accordance with the meaning of the language used and shall not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction which might otherwise apply.

9.3 Integration; Amendment. It is understood that there are no oral agreements between the parties hereto affecting this Agreement and this Agreement supersedes and cancels any and all previous negotiations, agreements and understandings, if any, between the parties, and none shall be used to interpret this Agreement. This Agreement may be amended at any time by an instrument in writing signed by both parties.

9.4 Severability. Should a portion of this Agreement be declared invalid or unenforceable by a judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not

affect any of the remaining portions of this Agreement which are hereby declared as severable and shall be interpreted to carry out the intent of the parties unless the invalid provision is so material that its invalidity deprives either party of the basic benefit of their bargain or renders this Agreement meaningless.

9.5 Corporate Authority. The persons executing this Agreement on behalf of the parties hereto warrant that (i) such party is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement, such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which said party is bound. This Agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties.

9.6 Counterparts. This Agreement may be executed in several counterparts, each of which will constitute one and the same instrument and will become binding upon the parties when at least one copy has been signed by both parties. This Agreement and any amendment will be considered executed when the signature page of a party is delivered by facsimile or other electronic transmission. Such electronic signatures will have the same effect as an original signature, provided that a wet signature copy is also mailed to the other party.

9.7 Modification of Agreement. No amendment to or modification of this Agreement will be valid unless made in writing and approved by Consultant and by the City Council or City Manager, as applicable. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.

[SIGNATURES ON FOLLOWING PAGE]

Attachment 1

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement as of the date first written above.

CITY:
CITY OF LAWNDALE,
a municipal corporation

By: _____
Robert Pullen -Miles, Mayor

ATTEST:

_____
Erica Harbison, City Clerk

APPROVED AS TO FORM:
Burke Williams & Sorensen, LLP

_____
Gregory M. Murphy, City Attorney

CONSULTANT:
Transtech Engineers, Inc.
a [California corporation]

By: _____
Name: Allen Cayir
Title: Chief Executive Officer

By: _____
Name: Sybil Cayir
Title: President

Address: 13367 Benson Ave.
Chino, CA 91710

Attachment 1

EXHIBIT "A"

SCOPE OF SERVICES

Provide on-call Traffic Engineering services to conduct field data collection and prepare engineering and traffic surveys in accordance with state law. The following services are specifically requested:

1. **Traffic signal design**
2. **Signing and striping design**
3. **Worksite traffic control design**
4. **Traffic calming design**
5. **Parking studies**
6. **School-related operations**
7. **ITS and communication design**
8. **Plan review services**
9. **Traffic study review**
10. **Conceptual design of roundabouts and similar improvements**
11. **Engineering and traffic surveys**
12. **Collision trend analysis and other safety studies**

Attachment 1

EXHIBIT "B"

SPECIAL REQUIREMENTS

A new Section 2.4 is added to the Agreement to read as follows:

"2.4 Prevailing Wages; Indemnification. Consultant and all subcontractors shall comply with applicable State Labor standards. To the extent applicable to Consultant's scope of services, State Labor standards provisions, including prevailing wage requirements, will be enforced such that the general rate of per diem wages (prevailing wage) shall be paid for each craft, classification, or type of worker needed to execute the contract to all workers employed in the execution of the contract for the work to be performed by Transtech Engineers, Inc. The State General Prevailing Wage Determination is as established by the California Department of Industrial Relations for Los Angeles County. *(Refer to http://www.dir.ca.gov/OPRL/PWD/Determinations/Statewide/C-TT.pdf for additional information.)* The prevailing rate of per diem wages are on file at the City of Lawndale Department of Public Works, 4722 Manhattan Beach Boulevard, Lawndale, California 90266, and are available to any interested party on request. The statutory provisions for penalties for failure to pay prevailing wages and/or failure to otherwise comply with state's wage and hour laws will be enforced. The Consultant is required to post at the job site the prevailing rate of per diem wages and other notices prescribed by regulation.

The Consultant and all subcontractors must submit electronic certified payroll records weekly directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) no less than monthly and must comply with all statutory requirements relating to certified copies of payroll records, including the maintenance of the records, their certification, and their availability for inspection as required by Labor Code Section 1776 and as required under Subsection 7-2.6 of said Standard Specifications for Public Works Construction.

Consultant shall indemnify, defend with legal counsel approved by the City, and hold the City and City's Parties harmless from and against any all liability, loss, damage, costs, or expenses (including attorneys' fees and court costs) arising from or as a result of any action, claim, or determination relating in any way to the failure to properly pay of prevailing wages. Moreover, the City retains the right to settle or abandon any such the matter without the Consultant's consent as to the City's liabilities or rights only."

- A new Section 5.1(e) is added to the Agreement to read as follows:

(e) Cyber Liability Insurance. The cyber liability insurance must include the following coverage:

- Liability arising from the theft, dissemination and/or use of confidential or personally identifiable information; including credit monitoring and regulatory fines arising from such theft, dissemination or use of the confidential information.
- Network security liability arising from the unauthorized use of, access to, or tampering with computer systems.
- Liability arising from the failure of technology products (software) required under the Agreement for Contractor to properly perform the services intended.
- Electronic media liability arising from personal injury, plagiarism or misappropriation of ideas, domain name infringement or improper deep-linking or framing, and infringement or violation of intellectual property rights.
- Liability arising from the failure to render professional services

If coverage is maintained on a "claims-made" basis, Contractor must maintain such coverage for an additional period of three years following termination of the Agreement.

Attachment 1

EXHIBIT "C"

SCHEDULE OF COMPENSATION

TRANSTECH ENGINEERS, INC.
SCHEDULE OF HOURLY RATES
Effective through June 30, 2023
Rates are average ranges, negotiable and can be adjusted to establish a fee for each assignment based on the specific project's scope, when such projects are identified by the City.

ENGINEERING			
Field Technician	$80	-	$90
Engineering Technician	$90	-	$100
Assistant CAD Drafter	$100	-	$115
Senior CAD Drafter	$115	-	$130
Associate Designer	$130	-	$145
Senior Designer	$145	-	$160
Design Project Manager	$180	-	$190
Assistant Engineer	$110	-	$120
Associate / Staff Engineer	$135	-	$150
Senior Civil Engineer	$190	-	$210
Traffic Analyst Technician	$95	-	$105
Associate Traffic Analyst	$140	-	$150
Senior Traffic Analyst	$150	-	$160
Professional Transportation Planner	$160	-	$175
Traffic Engineer Technician	$90	-	$100
Associate/Staff Traffic Engineer	$135	-	$150
Traffic Engineer	$160	-	$175
Senior Traffic Engineer	$175	-	$195
Project Manager	$175	-	$195
Senior Project Manager	$195	-	$215
Deputy City Engineer	$160	-	$180
City Engineer	$180	-	$195
Principal Engineer	$195	-	$215
BUILDING & SAFETY			
Permit Technician	$70	-	$80
Plan Check Technician/Analyst	$100	-	$120
Building Inspector	$120	-	$125
Senior Inspector	$125	-	$135
Plans Examiner/Checker	$135	-	$150
Plan Check Engineer	$150	-	$160
Deputy Building Official	$150	-	$160
Building Official	$160	-	$170

CONSTRUCTION MANAGEMENT			
Labor Compliance Analyst	$140	-	$145
Funds Coordinator	$145	-	$155
Office Engineer	$140	-	$150
Construction Inspector	$135	-	$145
Senior Construction Inspector	$145	-	$155
Construction Manager	$155	-	$175
Resident Engineer	$175	-	$190
PUBLIC WORKS INSPECTION			
Public Works Inspector	$135	-	$145
Senior Public Works Inspector	$145	-	$155
Supervising PW Inspector	$155	-	$165
SURVEY AND MAPPING			
Survey Analyst	$140	-	$145
Senior Survey Analyst	$145	-	$150
2-Man Survey Crew	$330	-	$340
Survey & Mapping Specialist	$175	-	$185
Licensed Land Surveyor	$200	-	$210
FUNDING & GRANT WRITING			
Funds Analyst	$140	-	$145
Senior Funds Analyst	$145	-	$155
Grant Writer	$160	-	$170
Funds & Grant Project Manager	$180	–	$190
PLANNING			
Community Development Technician	$75	-	$85
Planning Technician	$85	-	$95
Assistant Planner	$95	-	$115
Associate Planner	$115	-	$135
Senior Planner	$135	-	$160
Planning Manager	$160	-	$180
ADMINISTRATIVE STAFF			
Administrative/Clerical	$65	–	$75
Project Accountant	$75	–	$85

The above fees are increased each year July 1st automatically by the percentage change Los Angeles-Long Beach-Anaheim California Consumer Price Index-All Urban Consumers ("CPI-U") for the preceding twelve-month period as calculated for February by the U.S. Department of Labor Bureau of Labor Statistics and published by the United States Bureau of Labor Statistic.

Attachment 1

EXHIBIT "D"

SCHEDULE OF PERFORMANCE

Not applicable

Back to Agenda

November 16, 2023

The Honorable Gavin Newsom
Governor of California
1020 O Street, Suite 9000
Sacramento, CA 95814

RE: C/Green Line Extension to Torrance Project Funding Gap

Dear Governor Newsom:

Thank you and your staff for your ongoing commitment to expanding transportation options as a means to combat climate change. I am writing to inquire about potential State transportation or climate resilience funds for the C/Green Line Extension to Torrance Project (the Project), Hawthorne Option.

The Project will have generational impacts across the Los Angeles South Bay (South Bay), as well as the entire Los Angeles County (County) areas, filling a major gap in the County's regional transportation needs. It will be one step in a series of projects that will seamlessly connect riders across the County. With projected job growth alongside worsening traffic congestion in the South Bay, the Project will provide outsized benefits to the region. The Los Angeles County Metropolitan Transportation Authority (LA Metro) Board was advised that it will serve up to 15,648 daily trips in 2042 and reduce 19.5 million Vehicle Miles Traveled per year, alleviating the heavy pollution burden (2,369 metric tons of carbon dioxide per year) on communities along the Project.

While the Project's benefits are clear, there remains significant and varied funding gaps for the three alignments under consideration: 1) Metro Right of Way (ROW), which is elevated in some areas; 2) Trench Option that travels below the street level on Metro ROW and opens to the sky; and 3) Hawthorne Option that travels along a section of the I-405 freeway and Hawthorne Boulevard. All of these options have their own significant tradeoffs and impacts; however, there is roughly a $1 billion cost difference between the Metro ROW and the Hawthorne options which makes it difficult to truly compare them without factoring in cost. Despite confirmed funding through Measure R, Measure M, the Transit and Intercity Rail Capital Program Grant (2018), and the 3% Local Match, there is still a funding gap for all of the Project's options.

At the present time, jurisdictions within the South Bay are not yet aligned on any option. Lawndale City Council and Redondo Beach City Council are both in support of the

November 16, 2023

The Honorable Laphonza Butler
Senator, State of California
United States Senate
Dirksen Senate Office Building, Room G-12
Washington, DC 20510

The Honorable Maria Cantwell
Senator, State of California
United States Senate
511 Hart Senate Office Building
Washington, DC 20510

The Honorable Alex Padilla
Senator, State of California
United States Senate
112 Hart Senate Office Building
Washington, DC 20510

RE: C/Green Line Extension to Torrance Project Funding Gap

Dear Senators Butler, Cantwell, and Padilla:

Thank you and your staff for your ongoing commitment to expanding transportation options as a means to combat climate change. I am writing inquire about potential Federal transportation or climate resilience funds for the C/Green Line Extension to Torrance Project (the Project), Hawthorne Option. With the potential shut down of the Federal government, I understand that it may be some time before you can fully respond to this inquiry.

The Project will have generational impacts across the Los Angeles South Bay (South Bay), as well as the entire Los Angeles County (County), filling a major gap in the regional transportation needs. It will be one step in a series of projects that will seamlessly connect riders across the County. With projected job growth alongside worsening traffic congestion in the South Bay, the Project will provide outsized benefits to the region. The Los Angeles County Metropolitan Transportation Authority (LA Metro) Board was advised

November 16, 2023

The Honorable Ted W. Lieu
Congressman, State of California
United States House of Representatives
2454 Rayburn House Office Building
Washington, DC 20515

The Honorable Maxine Waters
Congresswoman, State of California
United States House of Representatives
2221 Rayburn House Office Building
Washington, DC 20515

RE: C/Green Line Extension to Torrance Project Funding Gap

Dear Congressmembers Lieu and Waters:

Thank you and your staff for your ongoing commitment to expanding transportation options as a means to combat climate change. I am writing inquire about potential Federal transportation or climate resilience funds for the C/Green Line Extension to Torrance Project (the Project), Hawthorne Option. With the potential shut down of the Federal government, I understand that it may be some time before you can fully respond to this inquiry.

The Project will have generational impacts across the Los Angeles South Bay (South Bay), as well as the entire Los Angeles County (County), filling a major gap in the regional transportation needs. It will be one step in a series of projects that will seamlessly connect riders across the County. With projected job growth alongside worsening traffic congestion in the South Bay, the Project will provide outsized benefits to the region. The Los Angeles County Metropolitan Transportation Authority (LA Metro) Board was advised that it will serve up to 15,648 daily trips in 2042 and reduce 19.5 million Vehicle Miles Traveled per year, alleviating the heavy pollution burden (2,369 metric tons of carbon dioxide per year) on communities along the Project.

While the Project's benefits are clear, there remains significant and varied funding gaps for the three alignments under consideration: 1) Metro Right of Way (ROW), which is

Back to Agenda

CITY OF LAWNDALE
14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Yvette Hall, Assistant City Clerk

SUBJECT: Mayor/Councilmember Report of Attendance at Meetings and/or Events

No supporting documentation was forwarded to the City Clerk Department for this item.

Back to Agenda

CITY OF LAWNDALE
14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Yvette Hall, Assistant City Clerk

SUBJECT: Conference with Labor Negotiator
The City Council will conduct a closed session, pursuant to Government Code section 54957.6, with the City Manager, the City Attorney, and the City's negotiators, regarding labor negotiations with Local 1895, Council 36, American Federation of State, County and Municipal Employees, AFL-CIO, representing the City's mid-management and classified employees.

No public documents were forwarded to the City Clerk Department for this item.

Back to Agenda

CITY OF LAWNDALE
14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Yvette Hall, Assistant City Clerk

SUBJECT: Conference with Legal Counsel – Existing Litigation
The City Council will conduct a closed session, pursuant to Government Code section 54956.9(d)(1), to discuss existing litigation: Name of Case: Abdul R. Pasta V. The City of Lawndale, Los Angeles Superior Court Case No. 23STLC07381.

Back to Agenda

CITY OF LAWNDALE
14717 BURIN AVENUE, LAWNDALE, CALIFORNIA 90260
PHONE (310) 973-3200 ♦ www.lawndalecity.org

DATE: December 4, 2023

TO: Honorable Mayor and City Council

FROM: Yvette Hall, Assistant City Clerk

SUBJECT: Public Employee Performance Evaluation – City Manager
The City Council will hold a closed session, pursuant to Government Code section 54957(b), to conduct an employee evaluation concerning the City Manager.

No public documents were forwarded to the City Clerk Department for this item.