

# 5th & Sterling Project

San Bernardino, California



## DRAFT ENVIRONMENTAL IMPACT REPORT SCH No. 2024050111

### Lead Agency

City of San Bernardino  
201 North E Street, 3rd Floor  
San Bernardino, CA 92401



Public Review Draft | Date: September 17, 2024

# Draft Environmental Impact Report

## SCH No. 2024050111

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### 5<sup>th</sup> & Sterling Project

San Bernardino, California

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**Lead Agency**

City of San Bernardino  
201 North E Street, 3<sup>rd</sup> Floor  
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**Lead Agency Discretionary Permit**

Development Permit No. 23-13



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## ACRONYMS AND ABBREVIATIONS

<u>Acronym</u>	<u>Definition</u>
§	Section
>	greater than
≥	greater than or equal to
a.m.	Ante Meridiem (between the hours of midnight and noon)
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 52	Native Americans: California Environmental Quality Act
AB 1493	Pavley Fuel Efficiency Standards
AB 1327	California Solid Waste Reuse and Recycling Act
AB 939	California Solid Waste Integrated Management Act
AB 1881	California Assembly Bill 1881, California Water Conservation Act of 2006
AC	Acres
ACM	Alternative Calculation Method
ADT	Average Daily Traffic
AFB	Air Force Base
AIRFA	American Indian Religious Freedom Act
AMSL	Above Mean Sea Level
A-P Act	Alquist-Priolo Earthquake Fault Zoning Act
APS	Alternative Planning Strategy
APN	Assessor Parcel Number
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BACM	Best Available Control Measure
BACT	Best Available Control Technology
BAU	Business as Usual
BC	black carbon
BMPs	Best Management Practices
B.P.	Before Present
BRA	Biological Resources Assessment
BTR	Biological Technical Report
BTS	backbone transmission system
BTU	British thermal unit



C <sub>2</sub> Cl <sub>4</sub>	perchloroethylene
C <sub>2</sub> F <sub>6</sub>	Hexafluoroethane
C <sub>2</sub> H <sub>4</sub> O	acetaldehyde
C <sub>2</sub> H <sub>6</sub>	Ethane
C <sub>4</sub> H <sub>6</sub>	1,3-butadiene
C <sub>6</sub> H <sub>6</sub>	benzene
CA	California
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod™	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geological Energy Management Division
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Calveno	California vehicle noise
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPP	Community Air Protection Program
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CCAA	California Clear Air Act
CCRUS	Carbon Capture, Removal, Utilization, and Storage
CCUS	carbon capture, utilization, or storage
CD	consistency determination
CDC	California Department of Conservation
CDR	carbon dioxide removal
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
C <sub>2</sub> F <sub>6</sub>	Hexafluoroethane
CF <sub>4</sub>	Tetrafluoromethane
CFCG	California Fish and Game Code
CFR	Code of Federal Regulations



CFS	Cubic Feet per Second
C <sub>2</sub> H <sub>6</sub>	Ethane
CH <sub>2</sub> O	formaldehyde
CH <sub>4</sub>	Methane
CIWMB	California Integrated Waste Management Board
CMB	crushed miscellaneous base
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
COH	coefficient of haze
COHb	carboxyhemoglobin
COP	conferences of the parties
CPEP	Clean Power and Electrification Pathway
CPF	cancer potency factor
CPUC	California Public Utilities Commission
CRDR	City Regulations and Design Requirements
CRM	CRM TECH
Cr(VI)	hexavalent chromium
CTA	core transport agents
CTC	California Transportation Commission
CTCs	county transportation commissions
CTP	Clean Truck Program
CTR	Commute Trip Reduction
CWA	Clean Water Act
CWC	California Water Code
CY	Cubic Yards
dB	Decibel
dBA	A-weighted Decibels
D/ERC	City of San Bernardino Development and Environmental Review Committee
DEM	Digital Elevation Model
DIF	Development Impact Fee
DMV	Department of Motor Vehicles
DOE	Determination of Eligibility
DP-D	Development Permit Type - D
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan



DSF	Delhi Sands flower-loving fly
E	Existing Conditions
EA	Existing plus Ambient Conditions
E+P	Existing plus Project Conditions
EA	Energy Analysis
EAC	Existing plus Ambient Plus Cumulative Conditions
EAP	Existing Plus Ambient Plus Project
EAPC	Existing Plus Ambient Plus Cumulative Plus Project Conditions
EC	elemental carbon
EIA	Energy Information Administration
EIR	Environmental Impact Report
EMFAC	Emission Factor Model
EO	Executive Order
EPA	Environmental Protection Agency
EPS	Emission Performance Standard
ESA	Endangered Species Act
ETC	Employee Transportation Coordinator
et seq.	et sequentia, meaning "and the following"
ETW	equivalent test weight
EV	Electric Vehicle
EVWD	East Valley Water District
F	Fahrenheit
FAA	Federal Aviation Administration
FAR	floor area ratio
FAR	firm access rights
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GBN	ground-based noise
GBV	ground-based vibration
GCC	Global Climate Change
Gg	Gigagrams
GHG	Greenhouse Gas



GHGA	Greenhouse Gas Analysis
g/idle-hr	grams per idle-hour
gpd	Gallons per Day
gpm	Gallons per minute
g/mile	grams per mile
GRH	Guaranteed Ride Home
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GT&S	Gas Transmission and Storage
g/vmt	grams per vehicle miles traveled
GVWR	Gross Vehicle Weight Rating
GWh	gigawatt hours
GWP	Global Warming Potential
H <sub>2</sub> O	Water Vapor
HAPs	hazardous air pollutants
HARS	Historical/Archaeological Resources Survey Report
HCP	Habitat Conservation Plan
HDT	heavy duty trucks
HFCs	Hydrofluorocarbons
HFC-23	fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
HI	Hazard Index
Hp	horsepower
HRA	Health Risk Assessment
HSC	Health and Safety Code
I	Industrial
I	Interstate
I-10	Interstate-10
I-210	Interstate-210
I-215	Interstate-215
i.e.	that is
IEPR	Integrated Energy Policy Report
IL	Industrial Light
IPCC	Intergovernmental Panel on Climate Change
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ISO	Independent Service Operator



ITIP	Interregional Transportation Improvement Plan
ITP	Incidental Take Permit
IWMA	Integrated Waste Management Act
JPA	Joint Powers Authority
kg	kilogram
kWh	kilowatt-hour
LAPM	Los Angeles Pocket Mouse
lbs	pounds
LCA	Life-cycle analysis
LCD	liquid crystal display
LCFS	low carbon fuel standard
LDA	Light duty autos
LDT	Light-Duty-Trucks
LEA	Lead Enforcement Agency
LEED	Leadership in Energy and Environmental Design
Leq	equivalent continuous sound level
LEV III	Low-Emission Vehicle Regulation for criteria
LHDT	light-heavy duty trucks
LHMP	Local Hazard Mitigation Plan
LOS	Level of Service
LSTs	Localized Significance Thresholds Methodology
LST	Localized Significance Threshold Methodology
LTF	Local Transportation Fund
LULUCF	Land-Use, Land-Use Change and Forestry
M <sup>3</sup>	Cubic Meter
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MCY	motorcycles
MDV	Medium-duty-vehicles
MEISC	maximally exposed individual school child
MEIR	maximally exposed individual receptor
MEIW	maximally exposed individual worker
mg	milligrams
MGD	million gallons per day
Mg/kg/day	milligrams per kilogram per day



MHDT	medium-heavy duty truck
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measure
MMcfd	million cubic feet per day
MMRP	Mitigation Monitoring and Reporting Program
MMTs	million metric tons
MMTCO <sub>2</sub> e	million metric tons of carbon dioxide equivalent
Mph	Miles per hour
MPO	Metropolitan Planning Organization
MPO/RTPA	metropolitan planning organizations/Regional Transportation Planning Agencies
MRZ-2	Mineral Resource Zone 2
MT	metric ton
MT/yr	metric tons per year
MVA	Mega Volt Amps
MWEL	Model Water Efficient Landscape Ordinance
N/A	Not Applicable
N <sub>2</sub>	Nitrogen
n.d.	no date
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Planning
NDA	No Development Alternative
NDC	nationally determined contributions
NESHAP	National Emission Standards for Hazardous Air Pollutants
NF <sub>3</sub>	nitrogen trifluoride
NIA	Noise Impact Analysis
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health
No.	Number
NO	Nitric Oxide
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
N <sub>2</sub>	Nitrogen
N <sub>2</sub> O	Nitrous Oxide
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation



NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPRM	Notice of Proposed Rule Making
NPS	National Park Service
NPS	Non-Point Source
NRCE	San Bernardino General Plan Natural Resources and Conservation Element
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NVIA	Noise and Vibration Impact Assessment
O <sub>2</sub>	Oxygen
O <sub>3</sub>	Ozone
OBD-II	On-Board Diagnostic system
OD	Origin/Destination
ODC	Ozone Depleting Compounds
OEHHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	Lead
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PFCs	Perfluorocarbons
PG&E	Pacific Gas & Electric
p.m.	Post Meridiem (between the hours of noon and midnight)
PM	Particulate Matter
PM <sub>2.5</sub>	Fine Particulate Matter (2.5 microns or smaller)
PM <sub>10</sub>	Fine Particulate Matter (10 microns or smaller)
POLA	Port of Los Angeles
POLB	Port of Long Beach
ppb	parts per billion
ppm	parts per million
pp.	pages
ppt	parts per trillion
PPV	peak particle velocity
PRC	Public Resources Code
Psi	per square inch
PV	photovoltaic



RCNM	Roadway Construction Noise Model
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
REMEL	Reference Mean Emission Level
RFG-2	Reformulated Gasoline Regulation
RMS	root mean square
ROGs	Reactive Organic Gasses
ROW	Right-of-Way
RPA	Reduced Project Alternative
RPS	Renewable Portfolio Standards
RTIP	Regional Transportation Improvement Plans
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SF/s.f.	square foot or square feet
SB	Senate Bill
SB 100	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SBA	Small Building Alternative
SBCFCD	San Bernardino County Flood Control District
SBCFD	San Bernardino County Fire Department
SBCTA	San Bernardino County Transit Authority
SBCUSD	San Bernardino City Unified School District
SBIA	San Bernardino International Airport
SBIAA	San Bernardino International Airport Authority
SBKR	San Bernardino Kangaroo Rat
SBMWD	San Bernardino Municipal Water Department
SBTAM	San Bernardino Transportation Analysis Model
SBWRP	San Bernardino Water Reclamation Plant
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	Southern Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCH	California State Clearinghouse (Office of Planning and Research)
SCE	Southern California Edison
SCG	Southern California Geotechnical
SCS	Sustainable Communities Strategy



SDAB	San Diego Air Basin
SDG&E	San Diego Gas & Electric
SDWA	Safe Drinking Water Act
SED	socio-economic data
SF <sub>6</sub>	Sulfur Hexafluoride
SGMA	Sustainable groundwater management act
SHA	Safe Harbor Agreement
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SHRC	State Historical Resources Commission
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
SO <sub>4</sub>	Sulfates
SO <sub>x</sub>	Sulfur Oxides
SoCalGeo	Southern California Geotechnical
SP	Service population
SR	State Route
SRA	Source Receptor Area
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
STA	State Transit Assistance
STIP	Statewide Transportation Improvement Program
SWMD	Solid Waste Management Division
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TA	Traffic Analysis
TAC	Toxic Air Contaminants
TCRs	Tribal Cultural Resources
TDA	Transportation Development Act
TDM	Transportation Demand Management
TEA-21	Transportation Equality Act for 21st Century
Tpd	tons per day
TSM	Transportation Systems Management
μg	microgram
μg/m <sup>3</sup>	microgram per cubic meter
UC	Urban Crossroads, Inc.



UFP	ultrafine particles
UNFCCC	United Nations' Framework Convention on Climate Change
U.S.	United States
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Society
UTM	Universal Transverse Mercator
UWMP	Urban Water Management Plan
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
Vph	vehicles per hour
WAIRE Points	Warehouse Actions and Investments to Reduce Emissions Points
WDR	Water discharge requirements
WGS	World Geodetic System
WPCO	Warehouse Points Compliance Obligation
WQMP	Water Quality Management Plan
WRI	World Resources Institute
WRRRA	Water Reuse and Recycle Act
WSA	Water Supply Assessment
YSMN	Yuhaaviatam of San Manuel Nation Cultural Resources Management Department
Yr	year
ZEV	zero-emission vehicles
ZORI	zones of required investigation



## S.0 EXECUTIVE SUMMARY

### S.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, et seq. requires 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.

This Environmental Impact Report (EIR), California State Clearinghouse (SCH) No. 2024050111, was prepared in accordance with CEQA Guidelines Article 9, Sections 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed project, known as 5<sup>th</sup> & Sterling (hereafter, the "Project" or "proposed Project"). This EIR does not recommend approval or denial of the proposed Project; rather, this EIR is a source of factual information regarding potential impacts to the physical environment that may result from the Project's implementation. The Draft EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the City of San Bernardino will consider certifying the Final EIR and adopting required findings.

The City of San Bernardino's preliminary analysis determined that implementation of the Project would have the potential to result in significant environmental impacts under ten environmental topic areas. This determination was based on the completion of an Initial Study that represented the City of San Bernardino's independent judgment pursuant to CEQA Guidelines Section 15063, and in consideration of public comment received by the City in response to this EIR's Notice of Preparation (NOP). The Initial Study, NOP, and written comments received by the City in response to the NOP, are attached to this EIR as *Technical Appendix A*. The ten environmental topic areas that have the potential to be significantly affected by planning, constructing, and/or operating the proposed Project and that are analyzed in detail herein include:

- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. Air Quality          | 6. Greenhouse Gas Emissions       |
| 2. Biological Resources | 7. Noise                          |
| 3. Cultural Resources   | 8. Transportation                 |
| 4. Energy               | 9. Tribal Cultural Resources      |
| 5. Geology and Soils    | 10. Utilities and Service Systems |

Refer to EIR Section 4.0, *Environmental Analysis*, for a full account and analysis of the subject matters listed above. Subject areas for which the Initial Study concluded that impacts would be clearly less than significant and that do not warrant detailed analysis in this EIR are addressed in EIR Section 5.0, *Other CEQA Considerations*. For each of the aforementioned subject areas, this EIR describes: 1) the physical conditions that existed at the approximate time this EIR's NOP was published (May 1, 2024); 2) the type and magnitude of potential environmental impacts resulting from Project planning, construction, and operation; and 3) if warranted, recommends feasible mitigation measures that would reduce or avoid significant adverse environmental impacts that may result from the Project. A summary of the Project's significant environmental



impacts and the mitigation measures imposed by the City of San Bernardino to lessen or avoid these impacts is included in this Executive Summary as Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*. The City of San Bernardino applies mitigation measures that it determines 1) are feasible and practical for project applicants to implement, 2) are feasible and practical for the City of San Bernardino to monitor and enforce, 3) are legal for the City of San Bernardino to impose, 4) have an essential nexus to the Project's impacts, and 4) would result in a benefit to the physical environment. CEQA does not require the Lead Agency to impose mitigation measures that are duplicative of mandatory regulatory requirements.

## **S.2 PROJECT OVERVIEW**

### **S.2.1 PROJECT SCOPE AND SITE DEFINITIONS**

The Project Applicant (5<sup>th</sup> & Sterling, LLC) applied to the City of San Bernardino for a Development Permit Type-D (DP-D). The Project's DP-D application seeks to entitle a 25.12-acre property for development with a 557,000 square foot (s.f.) warehouse building and associated site improvements. The 25.12 acres that are proposed for development with warehouse uses as part of the Project's DP-D application are referred to as the "Project Site."

### **S.2.2 LOCATION AND SETTING**

The Project Site is located in the City of San Bernardino, which is located within the Valley subregion of San Bernardino County. The City of San Bernardino is situated north of the City of Loma Linda, northwest of the City of Redlands, west of the City of Highland, south of the San Bernardino Mountains, and east of the City of Rialto. The Project Site is located approximately 2.1 mile west of the 5<sup>th</sup> Street on/off-ramp to Interstate-210 (I-210) and approximately 2.8 miles north of Interstate-10 (I-10). At the local scale, the 25.12-acre Project Site is located to the immediate north of 5<sup>th</sup> Street, the immediate east of Sterling Avenue, the immediate south of 6<sup>th</sup> Street, and approximately 0.1 mile west of Lankershim Avenue. The site's location and regional context are described in EIR Section 2.0, *Environmental Setting*.

### **S.2.3 PROJECT SUMMARY**

For purposes of this EIR, the term "Project" refers to the discretionary action and subsequent permits and approvals required to implement the proposed Project and all activities associated with its implementation (including planning, construction, and ongoing operation). As noted above, the Project evaluated herein consists of an application for a DP-D. The Project entails the development of a 557,000 square foot (s.f.) high cube warehouse building. The building is designed to include 552,000 s.f. of ground floor space and 5,000 s.f. of mezzanine space with a total of 80 truck docking doors positioned along the southern side of the building. On-site uses would not include cold storage. Other proposed physical features include but are not limited to access driveways, surface parking areas, walls, fencing, lighting, utilities, and landscaping. Access to the Project Site would be accommodated by two driveways connecting with 5<sup>th</sup> Street, two driveways connecting with Sterling Avenue, and one driveway connecting with 6<sup>th</sup> Street. Off-site improvements required to support the Project include roadway frontage improvements along 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue and the installation of an underground electrical line that would run along Sterling Avenue north of the Project Site for approximately 0.64-mile to a connection point for electrical service. The principal discretionary action



requested by the Project Applicant to implement the proposed Project is a Development Permit Type-D (DP-D No. 23-13). Refer to EIR Section 3.0, *Project Description*, for a detailed description of the proposed Project.

#### **S.2.4 PROJECT OBJECTIVES**

The underlying purpose and goal of the proposed Project is to develop underutilized property in the City of San Bernardino with an economically viable, employment-generating use consistent with the City's Industrial Light (IL) General Plan and zoning designations. The following objectives are intended to achieve these underlying purposes:

- A. To expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas.
- B. To attract new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment.
- C. To develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property.
- D. To improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities.
- E. To develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that are complementary to other existing and planned industrial developments in the local area.
- F. To attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

#### **S.3 EIR PROCESS**

An Initial Study was prepared by the City of San Bernardino to determine whether any aspect of the proposed Project, either individually or cumulatively, may cause a significant adverse effect on the physical environment (refer to EIR *Technical Appendix A* for a copy of the Initial Study). For this Project, the Initial Study indicated that this EIR should focus on ten environmental subject areas listed above in Subsection S.1. After completion of the Initial Study, the City published a NOP (and also filed the NOP with the California Office of Planning and Research, "State Clearinghouse") to indicate that an EIR would be prepared for the Project. The Initial Study and NOP were distributed for a 30-day public review period, which began on May 1, 2024. The City of San Bernardino received written comments on the scope of the EIR during those 30 days, which were considered by the City during the preparation of this EIR.



This EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day review period. During the 45-day public review period, public notices announcing availability of the Draft EIR will be mailed to interested parties, an advertisement will be published in the San Bernardino Sun (a newspaper of general circulation in the Project area), and copies of the Draft EIR and its Technical Appendices will be available for review at the locations indicated in the public notices.

After the close of the 45-day Draft EIR public comment period, the City will prepare and publish responses to written comments it received on the environmental effects of the proposed Project. The Final EIR will be considered for certification by the City of San Bernardino Development and Environmental Review Committee (D/ERC). Certification of the Final EIR would be accompanied by the adoption of written findings and a statement of overriding considerations for one significant and unavoidable environmental impact identified in the EIR (vehicle miles traveled (VMT)). In addition, the City must adopt a Mitigation, Monitoring, and Reporting Program (MMRP), which describes the process to ensure implementation of the mitigation measures identified in the Final EIR. The MMRP will ensure CEQA compliance during Project construction and operation.

#### **S.4 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED**

CEQA Guidelines Section 15123(b)(2) requires the Lead Agency (City of San Bernardino) to identify any known issues of controversy in the Executive Summary. The Lead Agency has not identified any issues of controversy associated with the Project after consideration of all comments received in response to the NOP. Notwithstanding, the Lead Agency has identified several issues of local concern including, but not limited to, potential impacts to air quality, cultural resources, and greenhouse gas emissions.

Regarding issues to be resolved, this EIR addresses the environmental issues that are known by the City, that are identified in the Initial Study prepared for the Project, and that were identified in the comment letters that the City of San Bernardino received on this EIR's NOP (refer to EIR *Technical Appendix A*). Items raised in written comment to the NOP are summarized in Table 1-1, *Summary of NOP Comments*, in Section 1.0 of this EIR.

#### **S.5 ALTERNATIVES TO THE PROPOSED PROJECT**

In compliance with CEQA Guidelines Section 15126.6, an EIR must describe a range of reasonable alternatives to the Project. A brief description of the alternatives to the Project considered in this EIR is provided below; a detailed description of each alternative evaluated in this EIR, as well as an analysis of the potential environmental impacts associated with each alternative, is provided in EIR Section 6.0, *Alternatives*. Also described in Section 6.0 is a list of alternatives that were considered but rejected from further analysis.

##### **S.5.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE**

The No Project/No Development Alternative (NDA) considers no development on the Project Site beyond what occurs on the site under existing conditions. Under this Alternative, the approximately 25.12-acre site would remain vacant and undeveloped for the foreseeable future. The Project Site would be subject to routine



maintenance (i.e., discing) for weed abatement. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project Site in its existing condition. The NDA would reduce or avoid all of the Project's environmental effects but would not achieve any of the Project's objectives and would not facilitate roadway frontage improvements along 6th Street, 5th Street, and Sterling Avenue as called for by the City's General Plan.

### **S.5.2 REDUCED PROJECT ALTERNATIVE**

The Reduced Project Alternative (RPA) considers the development of the Project Site with one high cube warehouse building, but the proposed building would be reduced in size from approximately 557,000 s.f. under the proposed Project to approximately 471,000 s.f. under the RPA (representing a reduction in building area by approximately 15.4%). Under the RPA, the number of passenger vehicle parking spaces, located to the west of the proposed warehouse building, would be increased to 291 spaces in comparison to the 258 spaces provided under the proposed Project. The number of truck trailer parking stalls would be decreased from 108 spaces provided under the proposed Project to 84 spaces under the RPA. Similarly, the number of loading dock doors would be decreased from 80 spaces provided under the proposed Project to 61 spaces under the RPA. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the size of the building and thereby reduce the Project's significant and unavoidable impacts to transportation (VMT), although impacts would not be reduced to less-than-significant levels. The RPA would meet all of the Project's objectives although to a lesser degree than the Project and would reduce but not avoid the Project's environmental effects. This Alternative is considered the Environmentally Superior Alternative, as it reduces the Project's environmental impacts while achieving the Project's objectives although to a lesser degree.

### **S.5.3 TRUCK TRAILER STORAGE LOT ALTERNATIVE**

The Truck Trailer Storage Lot Alternative allows decision-makers to compare the environmental impacts of the Project to the environmental impacts that would occur if the property were developed with an approximate 900-space truck and trailer parking lot serving a local business or businesses. Under this Alternative, the entire Project Site would be developed for parking and landscaping would occur around the perimeter of the site for screening purposes. Under a reasonably foreseeable circumstance of truck trailer parking lots attracting 43 vehicle trips per acre per day, the lot is calculated to generate approximately 1,080 vehicle trips per day (43 x 25.12 acres), with a high percentage of those trips being trucks. This alternative assumes that the lot would serve a local business or business within a 10-mile radius of the Project Site. This alternative was selected to evaluate a scenario that would allow productive industrial use of the Project Site while not developing a structure other than security booths at the entrance and exit gates. The Truck Trailer Storage Lot Alternative would meet few of Project's objectives and would not substantially reduce or avoid the Project's environmental effects, other than a reduction of VMT due to the Alternative offering only a few jobs, and the assumption that it would serve a local business or businesses, reducing trip length as compared to the Project.



## **S.6 SUMMARY OF IMPACTS, MITIGATION MEASURES, AND CONCLUSIONS**

### **S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT**

The scope of detailed analysis in this EIR includes the ten subject areas identified in the Initial Study prepared pursuant to CEQA Guidelines Section 15063 and CEQA Statute Section 21002(e), as well as consideration of public comments received by the City on this EIR's NOP. The Initial Study, NOP, and public comments received in response to the NOP, are attached to this EIR as *Technical Appendix A*. Subject areas for which the City concluded that impacts would be less than significant and that do not warrant detailed analysis in this EIR include: aesthetics; agriculture and forestry resources; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; population and housing; public services; recreation; and wildfire. This EIR addresses these topics in EIR Subsection 5.0, *Other CEQA Considerations*.

### **S.6.2 IMPACTS OF THE PROPOSED PROJECT**

Table S-1, *Summary of Impacts, Mitigation Measures, and Conclusions*, provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines Section 15123(a). Also presented are the mitigation measures recommended by the City of San Bernardino to further avoid adverse environmental impacts or to reduce their level of significance. City Regulations and Design Requirements (CRDRs) that are applicable to the Project are also provided to further avoid adverse environmental impacts or to reduce their level of significance. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements. After the application of all feasible mitigation measures, the Project would result in significant and unavoidable environmental effects under four environmental subject areas, as summarized below.

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Although the analysis of the Project's potential impacts to VMT based on the Boundary VMT method were determined to be less than significant, the Project would exceed the City's significance thresholds based on the OD Method under both baseline (2023) and cumulative (2040) conditions. Although the Project would be subject to compliance with Mitigation Measure MM 4.8-1, which would reduce the Project's VMT, the effectiveness of commute trip reduction measures such as those listed in Mitigation Measure MM 4.8-1 cannot be guaranteed to reduce Project VMT to a level of less than significant. No additional feasible mitigation measures are available to measurably reduce the Project's VMT. Therefore, the Project's VMT impacts are considered significant and unavoidable on both a direct and cumulatively-considerable basis.



Table S-1 Summary of Impacts, Mitigation Measures, and Conclusions

Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
<b>4.1 Air Quality</b>				
<u>Threshold a:</u> The Project's proposed land uses would be consistent with the land use assumptions used in the AQMP, and Project operational emissions would not conflict with the SCAQMD AQMP. However, although the Project's construction-related air quality emissions would be below the SCAQMD LSTs, construction activities associated with the proposed Project would exceed applicable Regional Threshold for emissions of VOC prior to mitigation. With implementation of the required mitigation, the Project's construction-related VOC emissions would be reduced to below the SCAQMD regional threshold for this pollutant. Therefore, with implementation of the required mitigation, the Project's construction and long-term operations would not exceed any of the SCAQMD Regional Thresholds or LSTs, and Project impacts due to a conflict with the 2022 SCAQMD AQMP would be reduced to less-than-significant levels.	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.1-1:</b> All offroad equipment required for Project-related construction activities shall meet CARB Tier 4 interim emission standards or better, which shall be a requirement of grading and building permits. The Project Applicant shall ensure that the grading and building plans include a note specifying this requirement and that all Project contractors comply with the requirement through periodic inspection of the construction site by City of San Bernardino staff or its designee to confirm compliance. The Project applicant shall include this requirement in bid documents issued to prospective construction contractors. The City shall review the grading and building plans for compliance with this mitigation measure prior to issuance of a grading permit and building permit.  <b>MM 4.1-2:</b> To reduce VOC emissions associated with architectural coating, the Project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that ensure these requirements are implemented. The specifications shall be reviewed by the City for compliance with this mitigation measure prior to issuance of the Project's building permit.	Project Applicant, Construction Contractors	Prior to issuance of a grading permit and building permit and during construction
<u>Threshold b:</u> Emissions associated with long-term operation of the Project would not exceed any of the SCAQMD Regional Thresholds of significance. However, construction activities associated with the Project would exceed the SCAQMD Regional Threshold for VOC. Thus, prior to mitigation, the Project's construction activities would result in a cumulatively-considerable net increase of criteria pollutants (i.e., VOC) for which the project region is non-attainment (i.e., ozone) under an applicable federal or State ambient air quality standard. With implementation of Mitigation Measures MM 4.1-1 and MM 4.1-2, the Project would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and the Project would not conflict with the	Less-than-Significant Impact with Mitigation Incorporated		Project Applicant, Construction Contractors	During architectural coating of exterior surfaces



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SCAQMD 2022 AQMP. Thus, with implementation of the required mitigation, Project construction-related regional emissions impacts would be reduced to less-than-significant levels.				
		<p><b>CRDR 4.1-1:</b> The Project is required to comply with the provisions of SCAQMD Rule 403, “Fugitive Dust” by implementing the following dust control measures during construction activities, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.</p> <ul style="list-style-type: none"><li>▪ All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.</li><li>▪ The contractor shall ensure that all disturbed unpaved roads and disturbed areas upon which construction equipment will operate are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.</li><li>▪ The contractor shall ensure that traffic speeds on unpaved roads and Project Site areas are reduced to 15 mph or less.</li></ul> <p><b>CRDR 4.1-2:</b> The Project is required to comply with the provisions of SCAQMD Rule 1301 regarding stationary source equipment. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301</p>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<p>limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).</p> <p><b>CRDR 4.1-3:</b> The Project is required to comply with SCAQMD Rule 2305, Warehouse Indirect Source Rule, that requires owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NOX) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The rule imposes a “Warehouse Points Compliance Obligation” (WPCO) on warehouse operators. Operators satisfy the WPCO by accumulating “Warehouse Actions and Investments to Reduce Emissions Points” (WAIRE Points) in a given 12-month period. WAIRE Points are awarded by implementing measures to reduce emissions listed on the WAIRE Menu, or by implementing a custom WAIRE Plan approved by the SCAQMD.</p> <p><b>CRDR 4.1-4:</b> The Project would be required to comply with SCAQMD Rule 1401 by requiring that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.</p> <p><b>CRDR 4.1-5:</b> The Project is required to comply with applicable SCAQMD rules for construction activities on the Project Site. In addition to the SCAQMD requirements listed above, additional SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 431.2 (Low Sulfur Fuel); and Rule 1186 / 1186.1 (Street Sweepers).</p> <p><b>CRDR 4.1-6:</b> The Project is required to comply with the provisions of SCAQMD Rule 402, “Nuisance,” which requires</p>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.		
<u>Threshold c:</u> Project-related construction and long-term operational emissions would not exceed the SCAQMD LSTs for any criteria pollutant. Additionally, the Project considered herein would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. In addition, based on the Project-specific HRA ( <i>Technical Appendix B2</i> ), the Project would not expose the MEIR, MEIW, or MEISC to cancer risks exceeding the SCAQMD significance threshold of 10 in one million or non-cancer health risks exceeding the applicable significance threshold of 1.0. Even when combining the Project’s construction and operational-related emissions, the Project would not expose the MEIR to cancer or non-cancer related health risks exceeding 10 in one million or 1.0, respectively. Therefore, the Project would not expose sensitive receptors, which are located within one (1) mile of the Project Site, to substantial pollutant concentrations, and impacts would be less than significant.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A
<b>4.2 Biological Resources</b>				
<u>Threshold a:</u> The Project would not result in direct or indirect impacts to special-status plants or special-status animals. However, the Project has the potential to impact active migratory bird nests if vegetation is removed during the nesting season (February 1 through September 15), which is considered a significant direct and cumulatively-considerable impact of the proposed Project. Implementation of MM 4.2-1 would ensure that pre-construction surveys are conducted for nesting and migratory birds protected by the federal MBTA and/or CFCG during the breeding season to determine presence or absence prior to disturbance of habitat	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.2-1:</b> As a condition of tree removal permits, clearing permits, and any other permits that would authorize vegetation removal, the disturbance to and removal of trees and other potential bird nesting habitat shall be prohibited during the migratory bird nesting season (February 1 through September 15) unless a migratory bird nesting survey is completed. If vegetation removal is planned to occur during the migratory bird nesting season (February 1 – September 15), then a migratory bird nesting survey shall be completed in accordance with the following requirements:	Project Applicant, Construction Contractors	Prior to issuance of grading permits and during vegetation clearing activities



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
with the potential to support nesting birds. If sensitive nesting birds are present, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct impacts to nesting and migratory birds protected by the federal MBTA and/or California Fish and Game Code would be reduced to below a level of significance.		a) Within three (3) days prior to initiating tree removals and/or vegetation clearing, a nesting bird survey shall be conducted by a qualified biologist within the suitable habitat to be removed and within a 250-foot radius. b) If the survey identifies the presence of active sensitive bird nests, then the nests shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (i) the adult birds have not begun egg-laying and incubation; or (ii) the juveniles from the occupied nests are capable of independent survival.		
<u>Threshold d:</u> There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting migratory birds protected by the MBTA and California Fish and Game Code, should habitat removal occur during the nesting season and should nesting birds be present. Implementation of MM 4.2-1 would ensure that pre-construction surveys are conducted for nesting birds protected by State and federal regulations in the event that vegetation is removed from the Project Site during the breeding season. If nesting birds are present on the Project Site, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct and cumulatively-considerable impacts to nesting birds protected by State and federal regulations would be reduced to below a level of significance.	Less-than-Significant Impact with Mitigation Incorporated	c) If the biologist is not able to verify any of the conditions from sub-item “b,” above, then no disturbance shall occur within a buffer zone specified by the qualified biologist for each nest or nesting site. The buffer zone shall be species-appropriate (no less than 100-foot radius around the nest for non-raptors and no more than a 500-foot radius around the nest for raptors, or as otherwise determined by the qualified biologist) and shall be sufficient to protect the nest from direct and indirect impacts from construction activities. The nests and buffer zones shall be field checked approximately weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist with City concurrence verify that the nests are no longer occupied and/or juvenile birds can survive independently from the nests.		
<b>4.3 Cultural Resources</b>				
<u>Threshold a:</u> The Project Site does not contain any known historical resources as defined in CEQA Guidelines Section 15064.5. However, subsurface historical resources could be uncovered during grading and ground-disturbing construction activities. Thus, there is a possibility that	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.3-1:</b> As a condition of grading permit issuance, the construction contractor personnel involved in soil-disturbing operations shall be trained by a qualified professional historic resources consultant on the visual identification of historic resources. If historic resources are discovered during any earth-	Construction Contractors/ Project Archaeologist	During ground-disturbing activities and in the event that significant historical resources are



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
subsurface historic resources may be impacted by development of the Project as proposed. This is a potentially significant impact for which mitigation would be required. Implementation of MM 4.3-1 would ensure the proper identification and subsequent treatment of any significant historic resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important subsurface historic resources (if such resources are unearthed during Project construction) would be reduced to less-than-significant levels. Cumulatively-considerable impacts would likewise be reduced to less than significant.		moving operations associated with the proposed Project, the construction contractor shall be required by its contract to temporarily halt all work within 60 feet of the discovered resource until the professional historic resources consultant is called to the site to evaluate the suspected resource. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Any material uncovered and that is determined by the professional historical resources consultant to comprise a historically significant resource shall be curated at a public, non-profit institution with a research interest in the materials, if such an institution agrees to accept the material. If no institution accepts the historic material, they shall be offered to a local school, historical society, or Yuhaaviatam of San Manuel Nation Cultural Resources Management Department for educational purposes.		uncovered
<b>Threshold b:</b> No archaeological resources are known to be present in the Project area. Furthermore, the ground surface in almost the entire Project area has been disturbed in the past by agricultural operations and, later, construction activities, which have left little vestige of the native landscape today. As such, it is highly unlikely that significant archaeological resources would be uncovered during Project-related grading activities. Nonetheless, if Project-related ground-disturbing construction activities in native soil encounter an archaeological resource as defined in Section 15064.5, impacts would be potentially significant if the resource is not properly identified and treated. Implementation of MM 4.3-2 to MM 4.3-4 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important archaeological resources (if such resources are unearthed during Project construction) would be reduced to less-than-significant levels.	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.3-2:</b> As a condition of grading permit issuance, the construction contractor personnel involved in native soil-disturbing operations (which includes clearing, grubbing, tree removals and plantings, mass or rough grading, trenching, wall footings, fence and sign post placement and removal, excavation for all utility, drainage, and irrigation lines, and any other activity involving disturbance of native soil), shall be trained by a qualified professional archaeologist meeting the Secretary of the Interior Standards and/or a representative from the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians) on the visual identification of archaeological and tribal cultural resources. If suspected resources are discovered during Project construction, the construction contractor shall be required by its contract to temporarily halt all work within 60 feet of the discovered resource until a professional archaeologist meeting the Secretary of the Interior Standards is called to the site to evaluate the suspected resource. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. YSMN shall be contacted regarding any pre-contact and/or historic-era finds and be provided information after the	Construction Contractors/ YSMN	During ground-disturbing activities and in the event that significant cultural resources are uncovered



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
Cumulatively-considerable impacts would likewise be reduced to less than significant.		<p>archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. If it is determined that the resource has no tribal cultural significance to YSMN but may have significance to another Native American tribe that engaged in AB 52 consultation, that Native American tribe shall be contacted and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.</p> <p><b>MM 4.3-3:</b> If significant pre-contact and/or historic-era cultural resources, as defined by CEQA are discovered and avoidance cannot be ensured, the archaeologist shall develop a Treatment Plan, the drafts of which shall be provided to the City of San Bernardino and YSMN for review, comment, and concurrence. If it is determined that the resource has no tribal cultural significance to YSMN but it may have significance to another Native American tribe that engaged in AB 52 consultation, then the draft Treatment Plan shall be provided to the Native American tribe for review, comment, and concurrence. Any and all findings of discovered resources will be subject to the protocol detailed within the Treatment Plan. The archaeologist shall monitor the remainder of the Project's soil-disturbing activities and shall implement the Treatment Plan accordingly.</p> <p><b>MM 4.3-4:</b> Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Project Applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or Applicant shall, in good faith, consult with YSMN throughout the life of the project.</p> <p><b>MM 4.3-5</b> If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State</p>	<p>Project Archaeologist/ YSMN</p> <p>Project Archaeologist/ YSMN</p> <p>Project Archaeologist/ YSMN</p>	<p>During ground-disturbing activities and in the event that significant cultural resources are uncovered</p> <p>At completion of ground-disturbing construction activities</p> <p>During ground-disturbing activities and in the event that human remains are</p>



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		Health and Safety Code §7050.5 and that code enforced for the duration of the project.		uncovered
<b>4.4 Energy</b>				
<u>Threshold a:</u> Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant requiring no mitigation.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A
<u>Threshold b:</u> Energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other warehouse projects of similar scale and intensity that are operating in California, as the Project would be subject to current regulatory requirements. Based on the analysis presented herein, the Project would not conflict with or obstruct a federal or State plan for renewable energy or energy efficiency, and impacts would be less than significant.	Less-than-Significant Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A
<b>4.5 Geology and Soils</b>				
<u>Threshold a(iii):</u> Due to the presence of artificial fill soils on the Project Site, the Project would have the potential to be impacted by seismic-related ground failure. Thus, a significant direct impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical report ( <i>Technical Appendix F1</i> ). Implementation of MM 4.5-1 would ensure that the Project implements the recommendations of the Project's geotechnical report ( <i>Technical Appendix F1</i> ), which would ensure measures are implemented to address potential	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.5-1:</b> Prior to the issuance of grading permits, the Director of Public Works for the City of San Bernardino (or his/her designee) shall verify that all of the recommendations given in the Project's May 26, 2023 (revised February 16, 2024) "Geotechnical Investigation, Proposed Industrial Building, NEC 5 <sup>th</sup> Street and Sterling Avenue, San Bernardino, California," prepared by Southern California Geotechnical, are incorporated into the construction and grading plans. The recommendations shall include, but not be limited to the following:	Project Applicant, Construction Contractors	Prior to issuance of grading or building permits



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impacts due to seismic-related ground failure. With implementation of the required mitigation, potential impacts including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, and landslides would be reduced to less-than-significant levels.		<ul style="list-style-type: none"><li>• <u>Site Stripping and Demolition</u> Debris resulting from demolition shall be disposed of off-site. Alternatively, concrete and asphalt debris may be crushed to a maximum 1-inch particle size, mixed with the on-site soils, and reused as compacted structural fill. It may also be feasible to process these materials into crushed miscellaneous base (CMB).</li></ul>		
<u>Threshold c:</u> Due to the presence of artificial fill soils on the Project Site, the Project would have the potential to be impacted by soil that is unstable or has the potential to become unstable. Thus, a significant direct impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical report ( <i>Technical Appendix FI</i> ). Implementation of MM 4.5-1 would ensure that the Project implements the recommendations of the Project's geotechnical report ( <i>Technical Appendix FI</i> ), which would ensure measures are implemented to address potential impacts associated with soil shrinkage/subsidence. With implementation of the required mitigation, substantial adverse effects associated with soil that is unstable or has the potential to become unstable would be reduced to less-than-significant levels.	Less-than-Significant Impact with Mitigation Incorporated	<p>Initial site preparation shall include stripping of any topsoil, vegetation, organic debris, and any scattered debris on the site. These materials shall be disposed of off-site. The actual extent of stripping shall be determined in the field by a representative of the geotechnical engineer, based on the organic content and the stability of the encountered materials.</p> <ul style="list-style-type: none"><li>• <u>Treatment of Existing Soils: Building Pad</u> Remedial grading shall be performed within the proposed building area in order to remove the existing undocumented fill soils. The existing soils within the proposed building area shall be overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed building pad subgrade elevation, whichever is greater. The overexcavation areas shall extend at least 5 feet beyond the building perimeter and foundations, and to an extent equal to the depth of fill below the new foundations. Following completion of the overexcavation, the subgrade soils shall be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. After a suitable overexcavation subgrade has been achieved, the exposed soils shall be scarified to a depth of at least 12 inches, and thoroughly watered to</li></ul>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<p>raise the moisture content of the underlying soils to at least 0 to 4 percent above optimum moisture content, extending to a depth of at least 24 inches. The moisture conditioning of the overexcavation subgrade soils shall be verified by the geotechnical engineer. The subgrade soils shall then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The previously excavated soils may then be replaced as compacted structural fill.</p> <p>• <u>Treatment of Existing Soils: Retaining Walls and Site Wall</u> The existing soils within the areas of proposed retaining and non-retaining site walls shall be overexcavated to a depth of at least 3 feet below foundation bearing grade and replaced as compacted structural fill with the same requirements as the proposed building pad or as approved by a geotechnical engineer. Any undocumented fill soils within any of these foundation areas shall be removed in their entirety.</p> <p>• <u>Treatment of Existing Soils: Parking, Drive and Flatwork Areas</u> Subgrade preparation in the new parking, drive, and flatwork areas shall initially consist of removal of all soils disturbed during stripping operations. The geotechnical engineer shall then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils shall then be scarified to a depth of at least 12± inches, moisture conditioned to 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. the time of construction.</p>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<ul style="list-style-type: none"><li>• <u>Fill Placement</u><ul style="list-style-type: none"><li>o Fill soils shall be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 0 to 4 percent above the optimum moisture content, and compacted.</li><li>o On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer.</li><li>o All grading and fill placement activities shall be completed in accordance with the requirements of the 2022 CBC and the grading code of the City of San Bernardino.</li><li>o All fill soils shall be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Fill soils shall be well mixed.</li><li>o Compaction tests shall be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore shall not relieve the contractor of his responsibility to meet the job specifications.</li></ul></li><li>• <u>Selective Grading and Oversized Material Placement</u><p>Since the proposed grading will require excavation of cobble containing soils, it may be desirable to selectively grade the proposed building pad area. All materials greater than 6 inches in size be excluded from the upper 1 foot of the surface of any compacted fills. The placement of any oversized materials shall be performed in accordance with the Grading Guide Specifications included in Appendix D of the Project's geotechnical report. If disposal of oversized</p></li></ul>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<p>materials is required, rock blankets or windrows shall be used and such areas shall be observed during construction and placement by a representative of the geotechnical engineer.</p> <ul style="list-style-type: none"><li>• <u>Imported Structural Fill</u> All imported structural fill shall consist of very low expansive (EI &lt; 20), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D of the Project's geotechnical report.</li><li>• <u>Utility Trench Backfill</u> In general, all utility trench backfill soils shall be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. As an alternative, a clean sand (minimum Sand Equivalent of 30) may be placed within trenches and compacted in place. All utility trench backfills shall be witnessed by the geotechnical engineer. The trench backfill soils shall be compaction tested where possible; probed and visually evaluated elsewhere.</li></ul>		
<b>4.6 Greenhouse Gas Emissions</b>				
<u>Threshold a:</u> The Project would result in approximately 3,300.76 MTCO <sub>2</sub> e per year; thus, the proposed Project slightly would exceed the City's screening threshold of 3,000 MTCO <sub>2</sub> e per year. Thus, prior to mitigation the Project would result in a significant cumulatively-considerable impact due to emissions of GHGs that may have a significant impact on the environment. Implementation of CRDR 4.6-1 and MM 4.6-1 through MM 4.6-3 would reduce the Project's operational emissions of GHGs. Implementation of the required mitigation and CRDR would reduce the Project's	Less-than-Significant-Impact with Mitigation Incorporated	<p><b>MM 4.6-1:</b> Prior to tenant occupancy, the City shall condition the Project to require that all on-site equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) be powered by electricity, and a minimum of one (1) charging station for the on-site equipment shall be accommodated on site.</p> <p><b>MM 4.6-2:</b> In order to reduce the Project's demand for water resources and associated GHG emissions, prior to issuance of building permits, the City of San Bernardino shall review the</p>	<p>City Building and Safety/ Construction Contractors</p> <p>City Building and Safety</p>	<p>Prior to tenant occupancy</p> <p>Prior to issuance of building permits</p>



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
annual emissions of GHGs to approximately 2,911.80 MTCO <sub>2</sub> e per year. As such, with implementation of CRDR and mitigation measures, the Project's GHG emissions would be reduced to below the SCAQMD's recommended numeric threshold of 3.000 MTCO <sub>2</sub> e per year, and therefore Project impacts would be reduced to less-than-significant levels and impacts would be less-than-cumulatively considerable.		<p>building plans to ensure that the plans require the provision of low-flow and high-efficiency fixtures including toilets, urinals, and faucets. Low-flow and high-efficiency fixtures shall have the CalEEMod assumed reduction in flow of 13% for toilets, 12% for urinals, and 30% for faucets, relative to Title 24 requirements, and shall perform better than the minimum efficiency standard established by ENERGY STAR.</p> <p><b>PDF 4.6-1:</b> The Project design includes a proposed 250-kw solar system on the building, which is anticipated to generate up to 365,000 kWh/annually. The proposed solar system would reduce GHG emissions associated with the Project's anticipated energy demands. Accordingly, prior to or shortly after tenant occupancy, the 250-kw solar system shall be installed and operational.</p>	City Building and Safety	Prior to or shortly after tenant occupancy
		<p><b>CRDR 4.6-1:</b> The Project shall comply with all mandates imposed by the State of California and SCAQMD aimed at the reduction of GHG emissions. Those that are applicable to the Project and that would assist in the reduction of greenhouse gas emissions are listed below:</p> <ul style="list-style-type: none"><li>○ Global Warming Solutions Act of 2006 (AB32).</li><li>○ Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375)</li><li>○ Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.</li><li>○ Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements.</li><li>○ Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.</li></ul>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<ul style="list-style-type: none"><li>Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.</li><li>Renewable Portfolio Standards (SB 100). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.</li><li>Senate Bill 32 (SB 32). Requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.</li><li>SCAQMD Rule 2305. The SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule, on May 7, 2021. Owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NOX) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities.</li></ul> <p><b>CRDR 4.6-2:</b> The Project design includes a proposed 250-kw solar system on the building, which is anticipated to generate up to 365,000 kWh/annually. The proposed solar system would reduce GHG emissions associated with the Project's anticipated energy demands. Accordingly, prior to or shortly after tenant</p>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		occupancy, the 250-kw solar system shall be installed and operational.		
<u>Threshold b:</u> The Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan, which is the applicable plan adopted for the purpose of reducing the emissions of GHGs. As such, Project impacts due to a conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant.	Less-than-Significant-Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A
<b>4.7 Noise</b>				
<u>Threshold a:</u> The nearest receiver locations would not be exposed to Project-related construction noise levels exceeding the reasonable daytime 80 dBA $L_{eq}$ significance threshold or the reasonable nighttime threshold of 65 dBA $L_{eq}$ during Project construction activities. Project operational activities would not expose any nearby sensitive receptors to noise levels exceeding the City's threshold of significance of 65 dBA $L_{eq}$ , during daytime or nighttime operations. In addition, Project-related traffic noise increases would not expose any sensitive receptors to noise level increases exceeding the identified thresholds of significance. Accordingly, the proposed Project would not 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, and impacts would be less than significant requiring no mitigation.	Less-than-Significant-Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
<u>Threshold b:</u> Project construction activities would expose nearby sensitive receptors to construction vibration velocity levels ranging from 0.002 to 0.019 in/sec PPV, which is well below the identified threshold of significance of 0.3 PPV. Additionally, the Project does not include any land uses with the potential to generate substantial amounts of groundborne noise or vibration. Accordingly, the Project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant.	Less-than-Significant-Impact	Impacts would be less than significant; therefore, mitigation measures are not required.	N/A	N/A
		<p>CRDR 4.7.1 The Project shall comply with all the requirements of the City of San Bernardino Municipal Code regarding noise.</p> <ul style="list-style-type: none"><li>• With exception of nighttime concrete pouring activities, all construction activities shall comply with Section 8.54.070 of the City of San Bernardino Municipal Code, limiting construction activity to the hours within 7:00 a.m. and 8:00 p.m.</li><li>• As required pursuant to Municipal Code Section 8.54.060 (Exemptions), the Project Applicant is required to obtain a valid written agreement with the City of San Bernardino to authorize concrete pouring activities during construction of the proposed warehouse building during nighttime hours (i.e., between 8:00 p.m. and 7:00 a.m.).</li><li>• As required by Sections 8.54.020(C) (Prohibited Acts) of the City of San Bernardino Municipal Code, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.</li><li>• As required pursuant to Section 8.54.020(C) (Prohibited Acts) of the City of San Bernardino Municipal Code, no music or electronically reinforced speech from construction workers shall be allowed.</li></ul>		



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		<p>Although Project impacts due to noise would be less than significant, and although not identified herein to address any of the Project's significant environmental effects, the following mitigation measures nonetheless have been identified to ensure that measures are undertaken to reduce the Project's construction- and operational-related noise levels to the maximum feasible extent.</p> <p><b>MM 4.7-1:</b> During construction of the Project, the following provisions shall apply to reduce the Project's construction-related noise at nearby sensitive receptors to the maximum feasible extent.</p> <ul style="list-style-type: none"><li>• All stationary construction equipment shall be placed in such a manner so that the emitted noise is directed away from any sensitive receivers.</li><li>• Construction equipment staging areas shall be located at the greatest feasible distance between the staging area and the nearest receivers.</li><li>• The construction contractor shall limit equipment and material deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 8:00 p.m.).</li><li>• Electrically powered air compressors and similar power tools shall be used, when feasible, in place of diesel equipment.</li></ul>		
<b>4.8 Transportation</b>				
Threshold a: With implementation of transportation improvements and fair-share contributions towards improvements required by the City as conditions of Project approval, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including General Plan Circulation Element Policies and Connect SoCal, and no impacts would occur.	No Impact	No impact would occur; therefore, mitigation measures are not required.	N/A	N/A



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
<p><b>Threshold b:</b> Although the analysis of the Project's potential impacts to VMT based on the Boundary VMT method were determined to be less than significant, the Project would exceed the City's significance thresholds based on the OD Method under both baseline (2023) and cumulative (2040) conditions. Although the Project would be subject to compliance with Mitigation Measure MM 4.8-1, which would reduce the Project's VMT, the effectiveness of commute trip reduction measures such as those listed in Mitigation Measure MM 4.8-1 cannot be guaranteed to reduce Project VMT to a level of less than significant. No additional feasible mitigation measures are available to measurably reduce the Project's VMT. Therefore, the Project's VMT impacts are considered significant and unavoidable on both a direct and cumulatively-considerable basis.</p>	<p>Significant and Unavoidable Direct and Cumulatively Considerable Impact</p>	<p><b>MM 4.8-1:</b> Required Commute Trip Reduction Program: Future building lease or sales agreements shall include a requirement to implement a voluntary program to discourage single-occupancy vehicle trips for employees and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. Examples of potential Commute Trip Reduction (CTR) program features include the following:</p> <ul style="list-style-type: none"><li>• Designated Employee Transportation Coordinator (ETC): Identify an Employee Transportation Coordinator (ETC) as part of future site operations. The role of ETC is to provide education and point of contact for commute-related questions and commuter benefits.</li><li>• Marketing of Commuter Benefits for Employees: Provide commuter benefit materials to new hires. Additionally, provide an on-site message board (physical or digital) to educate employees of commuter benefits.</li><li>• Pre-Tax Transit Pass Benefits: Provide employees access to WageWorks (or comparable) to purchase transit passes or other approved commuter expenses pre-tax.</li><li>• End-of-Trip Facilities: Provide end-of-trip facilities such as bicycle parking, lockers, etc., in order to encourage employees to use alternative modes of transportation.</li><li>• Carpool and Vanpool Ride-Matching Services: Provide information about Waze Carpool and other carpool/vanpool ride-matching services to employees.</li><li>• Guaranteed Ride Home (GRH) Program. Establish a GRH program for employees that arrive to work</li></ul>	<p>City Planning/ Project Applicant</p>	<p>Prior to tenant occupancy</p>



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
		by carpool, vanpool, or transit and need to leave work early or are unable to use normal commute accommodations. The GRH Program can be provided via local transportation network companies.		
		<b>CRDR 4.8-1:</b> Prior to issuance of building permits, and as required pursuant to Section 3.27 of the City's Municipal Code, the Project Applicant/Developer shall comply with the applicable requirements of City of San Bernardino Development Impact Fee (DIF) program, which requires the payment of a fee to the City of San Bernardino (less any fee credits), to fund the installation of roadway segment and intersection improvements to reduce traffic congestion.		
<b>4.9 Tribal Cultural Resources</b>				
<u>Threshold a:</u> No tribal cultural resources are known to be present in the Project area. Furthermore, given the Project Site's historic location along on the floodplains of natural waterways, the Project location would not have been considered a favorable environment for long-term settlement in prehistoric times, nor would the setting be conducive for the preservation of subsurface tribal cultural resources. As such, it is highly unlikely that significant tribal cultural resources would be uncovered during Project-related grading activities. Nonetheless, if Project-related ground-disturbing construction activities in native soil encounter a significant tribal cultural resource, impacts would be potentially significant if the resource is not properly identified and treated. Implementation of Mitigation Measures 4.3-2 through 4.3-5 would ensure the proper identification and subsequent treatment of any significant tribal cultural resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.3-2 through MM 4.3-5</b> shall apply: The MMs require the following. <ol style="list-style-type: none"><li>1. Training of construction personnel.</li><li>2. Avoidance of any suspected archaeological or tribal cultural resources that may be uncovered during ground-disturbing activities.</li><li>3. Consultation with YSMN and a qualified archaeologist regarding any uncovered resources.</li><li>4. Implementation of a testing program for any uncovered resources.</li><li>5. Appropriate treatment of any discovered resources.</li><li>6. Appropriate treatment of human remains as required by State Health and Safety Code § 7050.5.</li></ol>	As specified for Mitigation Measures MM 4.3-2 through MM 4.3-4	As specified for Mitigation Measures MM 4.3-2 through MM 4.3-4



Summary of Impacts	Significance Determination	Mitigation Measures (MM) and City Regulations & Design Requirements (CRDR)	Responsible Parties	Implementation Stage
potential impacts to tribal cultural resources (if such resources are unearthed during Project construction) would be reduced to less-than-significant levels. Cumulatively-considerable impacts would likewise be reduced to less than significant.				
<b>4.10 Utilities and Service Systems</b>				
<u>Threshold a:</u> The physical environmental effects associated with installing the Project's water, wastewater, stormwater drainage, and dry utility infrastructure are evaluated throughout this EIR. The analysis in this EIR demonstrates that, with the implementation of mitigation measures, impacts associated with the Project's construction activities would be reduced to less-than-significant levels. In addition to on-site and site-adjacent construction activities, an off-site subsurface electrical line would be installed for a distance of approximately 0.64 mile to the north along Sterling Avenue. Construction activities would be present for up to approximately four days along the alignment in any particular location, temporarily contributing to potential impacts associated with air pollutant emissions and noise. Additionally, significant indirect biological resource and direct cultural resource and tribal cultural resource impacts could occur, the same as for construction activities on the Project Site.	Less-than-Significant Impact with Mitigation Incorporated	<b>MM 4.1-1, MM 4.2-1, MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4, MM 4.3-5, and MM 4.5-1</b> (related to trenching and backfilling) apply.	As specified for Mitigation Measures MM 4.1-1, MM 4.2-1, MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4, MM 4.3-5, and MM 4.5-1	As specified for Mitigation Measures MM 4.1-1, MM 4.2-1, MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4, MM 4.3-5, and MM 4.5-1



## 1.0 INTRODUCTION

This Environmental Impact Report (EIR) is an informational document that evaluates the physical environmental effects that could result from constructing and operating the proposed 5<sup>th</sup> & Sterling Project (hereafter, the “Project”). This EIR represents the independent judgment of the City of San Bernardino (hereafter sometimes referred to as the “City”), serving as the Lead Agency pursuant to the California Environmental Quality Act (“CEQA”). To implement the Project, the Project Applicant has requested the City of San Bernardino’s approval of a Development Permit Type-D (DP-D 23-13). Other related discretionary and ministerial actions that are required to construct and operate the Project are described in Section 3.0, *Project Description*, and are listed in Table 3-3, *Matrix of Project Approvals/Permits*, in this EIR.

When the term “Project” is used in this EIR with the initial letter capitalized, the term shall mean all aspects of the planning, construction, and operation of the proposed 5<sup>th</sup> & Sterling Project, including all discretionary and ministerial approvals and permits required for its implementation. When the term “Project Applicant” is used with the initial letters capitalized, the term shall mean Fifth & Sterling, LLC, which is the entity that submitted the DP-D 23-13 application to the City of San Bernardino to entitle the Project Site (as defined below) as proposed and as evaluated in this EIR.

### 1.1 TYPE OF EIR

As the first step in the CEQA compliance process, the City of San Bernardino prepared an Initial Study pursuant to State CEQA Guidelines Section 15063. The Initial Study determined that the Project has the potential to cause or contribute to significant environmental effects, and a Project EIR, as defined by State CEQA Guidelines Section 15161, is required. Accordingly, this document serves as a Project EIR.

Pursuant to State CEQA Guidelines Section 15161, a Project EIR shall “focus primarily on the changes in the environment that would result from the development project,” and “examine all phases of the project including planning, construction, and operation.” Also, in conformance with State CEQA Guidelines Section 15121(a), the purposes of this EIR are to: (1) disclose information by informing public agency decision makers and the public generally of the significant environmental effects associated with all phases of the Project, (2) identify possible ways to minimize or avoid those significant effects, and (3) to describe a reasonable range of alternatives to the Project that would feasibly attain most of the basic Project objectives but would avoid or substantially lessen its significant environmental effects.

### 1.2 SUMMARY OF THE PROJECT

As noted above and as more fully described in EIR Section 3.0, *Project Description*, the Project Applicant applied to the City of San Bernardino for DP-D 23-13. The Project’s DP-D application seeks to entitle a 25.12-gross-acre property for the construction and operation of one 557,000 square foot (s.f.) high cube warehouse building and associated site improvements.

Throughout this EIR, the 25.12 gross acres located at the northeast corner of 5<sup>th</sup> Street and Sterling Avenue are referred to as the “Project Site.”



Provided below is a brief description of the Project's application that is under consideration by the City of San Bernardino. Refer to EIR Section 3.0, *Project Description*, for a more comprehensive description of the Project's discretionary application.

- **Development Permit Type-D No. 23-13 (DP-D 23-13)** is a proposal for development of the 25.12-acre Project Site with a 557,000 s.f. high cube warehouse building, inclusive of warehouse space, loading docks and supporting office space and mezzanine space. Other proposed physical improvements would include, but are not necessarily limited to, the construction of access driveways, surface parking areas, walls, fencing, lighting, landscaping, and utility improvements. Off-site improvements required to support the Project include roadway frontage improvements along 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue to standards set forth in the City's General Plan, and the installation of an underground electrical line that would run approximately 0.62 miles along Sterling Avenue north of the Project Site to a connection point for electrical service.

### 1.3 STATEMENT OF LEGAL AUTHORITY

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.).

Pursuant to Public Resources Code Section 21067 and State CEQA Guidelines Section 15367, the City of San Bernardino is the Lead Agency under whose authority this EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City of San Bernardino has the obligation to: (1) ensure that this EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this EIR as part of its decision making process; (3) make a statement that this EIR reflects the City's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or Project alternatives identified in this EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (State CEQA Guidelines Sections 15090 through 15093).

This EIR fulfills the CEQA environmental review requirements for the proposed DP-D 23-13, and all other governmental discretionary and ministerial actions related to the Project.

### 1.4 USE OF THE EIR

The City of San Bernardino will release the Draft EIR for a minimum 45-day public review period. The City will make the Draft EIR and its supporting technical appendices available in electronic form on the City's website, located at:

[https://www.sbcity.org/city\\_hall/community\\_development\\_and\\_housing/planning/environmental\\_documents](https://www.sbcity.org/city_hall/community_development_and_housing/planning/environmental_documents)



Additionally, hard copies of the Draft EIR will be available at the following locations during their regular business hours:

City of San Bernardino  
Planning Division  
201 North E Street, 3rd Floor  
San Bernardino, CA 92401

Norman F. Feldheim Central  
Library  
555 W 6th Street  
San Bernardino, CA 92410

Highland Sam J. Racadio Library  
& Environmental Learning Center  
7863 Central Avenue  
Highland, CA 92346

During the 45-day review period, written comments on the content of the Draft EIR can be submitted to:

City of San Bernardino, Planning Division  
c/o Chantel Choice, Associate Planner  
290 North D Street  
San Bernardino, CA 9240  
choice\_ch@sbcity.org  
O: 909-384-7272

Public comments should be focused “on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated” (State CEQA Guidelines Section 15204(a)).

Following the Draft EIR’s 45-day public review period, the City will then respond in writing to all submitted comments pertaining to an environmental effect and publish a Final EIR.

A Project-related decision-making hearing will be subject to a noticed public hearing held before the City’s Development and Environmental Review Committee (“D/ERC”), which will include consideration of the information contained in the Final EIR and the associated administrative record. Decisions of the D/ERC are appealable to the Planning Commission and decisions of the Planning Commission are appealable to the City Council.

During the decision-making process, the Project and its design features, objectives, merits, environmental consequences, and socioeconomic factors, among other information contained in the Project’s administrative record, will be considered by the City. If the Final EIR is certified and the Project is approved, the City of San Bernardino and other public agencies with permitting authority over all or portions of the Project would be able to rely on the Final EIR as part of their permitting and approval processes to evaluate the environmental effects of the Project as they pertain to the approval or denial of applicable permits. City staff also would rely on the certified Final EIR to subsequently conduct administrative level reviews for implementing permits and approvals.

## **1.5 RESPONSIBLE AND TRUSTEE AGENCIES**

The California Public Resource Code Section 21153 requires that the Lead Agency consult with and request comments on the EIR by responsible and trustee agencies (see also State CEQA Guidelines Section 15082 and



Section 15086(a)). As defined by State CEQA Guidelines Section 15381, “the term ‘Responsible Agency’ includes all public agencies other than the Lead Agency that have discretionary approval power over the project.” A “Trustee Agency” is defined in State CEQA Guidelines Section 15386 as “a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California.” The Project would require approval from the following Trustee and Responsible Agencies:

- Santa Ana Regional Water Quality Control Board (RWQCB) is a Trustee Agency for the Project that is responsible for the protection of California’s water resources and water quality. The Santa Ana RWQCB is responsible for issuance of a National Pollutant Discharge Elimination System (NPDES) Permit to ensure that during and after Project construction, on-site water flows do not result in siltation, other erosional actions, or degradation of surface or subsurface water quality.
- San Bernardino Municipal Water Department (SBMWD) is a Responsible Agency pertaining to the approval of the Project’s proposed water and sewer connections.
- San Bernardino County Fire Department (SBCFD) is a Responsible Agency pertaining to the approval of fire hydrant locations and fire protection features for the Project.
- City of Highland is a Responsible Agency pertaining to the Project’s proposed off-site roadway improvements and utility trenching in the City of Highland.
- South Coast Air Quality Management District (SCAQMD) is a Responsible Agency should any permits to construct or permits to operate be required associated with the building user/ tenant.

There are no other known Trustee Agencies or Responsible Agencies identified for the Project. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether or not identified in this EIR, as part of their decision-making processes in relation to the proposed Project. Entities such as utility companies including but not limited to Southern California Edison (SCE) also may utilize this EIR associated with approving the installation of Project-related utility infrastructure. The Inland Valley Development Authority (IVDA) may also rely upon information in this EIR as part of IVDA’s agreement with the Project Applicant pertaining to a title exception on approximately 5.5 acres in the westernmost portion of the Project Site in favor of the IVDA that imposes a building height restriction based on the United States use of the former Norton Air Force Base. The Project Applicant already obtained a ministerial Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA) for the Project based on the proposed building height. The Project Applicant and IVDA intend to enter into an agreement that would allow the proposed building to be constructed in the restricted height area to the Project’s proposed building height.

## **1.6 SCOPE OF THE EIR**

### **1.6.1 EIR SCOPE**

The City prepared an Initial Study to determine the scope of the EIR and filed a Notice of Preparation (NOP) with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared to evaluate the Project’s potential to impact the environment. The NOP was filed with the State Clearinghouse and distributed to potential Responsible Agencies, Trustee Agencies, and other interested



parties on May 1, 2024, for a 30-day public review period. The NOP was distributed for public review to solicit responses that would help the City identify the full scope and range of potential environmental concerns associated with the Project so that these items could be fully examined in this EIR.

The NOP, public review distribution list, and written comments received by the City during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive issues raised in response to the NOP are summarized below in Table 1-1, *Summary of NOP Comments*. The purpose of this table is to present a list of the commenters and a summary of the environmental topics that were expressed by public agencies, interested parties, and members of the general public to be of primary interest. Although Table 1-1 does not list every comment received by the City during the NOP review period, it captures all of the substantive environmental topics raised by the public and which are addressed in this EIR. Regardless of whether or not an environmental or CEQA-related comment is listed in the table, all relevant comments received in response to the NOP are addressed in this EIR.

**Table 1-1 Summary of NOP Comments**

Commenter	Date	Comments	Location in EIR Where Comment is Addressed
<b>State and Regional Agencies and Organizations</b>			
Native American Heritage Commission	May 7, 2024	<ul style="list-style-type: none"><li>- Recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project.</li><li>- Notes AB 52 requirements, SB 18 provisions, and recommendations for the preparation of cultural resource assessments.</li></ul>	<ul style="list-style-type: none"><li>- 4.3, <i>Cultural Resources</i>; 4.9, <i>Tribal Cultural Resources</i></li></ul>
State of California Department of Justice	May 9, 2024	<ul style="list-style-type: none"><li>- Recommends use of Attorney General's Bureau of Environmental Justice best practices and mitigation measures for warehouse projects.</li><li>- States that diesel trucks emit air pollutants that adversely affect human health.</li><li>- States that priority should be placed on avoiding land use conflicts between warehouses and sensitive receptors</li><li>- States that priority should be placed on mitigating impacts of any unavoidable land use conflicts</li><li>- Requests that measures to reduce air pollutant emissions should be considered to help the State meet its air quality goals</li><li>- States that other warehouse projects will contribute to cumulative effects</li></ul>	<ul style="list-style-type: none"><li>- 3.0, <i>Project Description</i>; 4.1, <i>Air Quality</i>, 4.6, <i>Greenhouse Gas Emissions</i></li></ul>



Table 1-1 Summary of NOP Comments

Commenter	Date	Comments	Location in EIR Where Comment is Addressed
CARE CA	May 29, 2024	<ul style="list-style-type: none"><li>- Requests analysis of all identified impacts, imposition of all feasible mitigation, and study of a reasonable range of alternatives</li><li>- Requests that the EIR describe as much information about the nature of proposed operations as can be reasonably obtained</li><li>- Requests that the EIR make all efforts to minimize air quality effects and likely health consequences to the greatest extent possible</li><li>- Requests that the City adopt quantitative thresholds that embody climate change's threat to humans to determine the significance of the Project's GHG emissions</li><li>- Requests that mitigation measures be effective and enforceable and that they incorporate modern technology</li></ul>	<ul style="list-style-type: none"><li>- 3.0, <i>Project Description</i>, 4.0 <i>Environmental Analysis</i>, 4.1 <i>Air Quality</i>, 4.6 <i>Greenhouse Gas Emissions</i></li></ul>
<b>Local Agencies and Organizations</b>			
Lozeau Drury, LLP on behalf of SAFER	May 8, 2024	<ul style="list-style-type: none"><li>- Requests notices of CEQA actions and notices of public hearings pertaining to the proposed Project.</li></ul>	<ul style="list-style-type: none"><li>- 1.0, <i>Introduction</i></li></ul>

In consideration of the Initial Study's conclusions and all comments received by the City of San Bernardino in response to the NOP, this EIR provides a detailed analysis of the Project's potential to cause adverse effects under the following topic areas:

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The analyses related to the topics listed above are provided in EIR Section 4.0, *Environmental Analysis*.

Based on the information provided in the Initial Study prepared for the Project (see *Technical Appendix A*), the City of San Bernardino concluded that the Project would clearly result in no or less-than-significant impacts to several environmental topic areas, including: Aesthetics; Agriculture and Forestry Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Population and Housing; Public Services; Recreation; and Wildfire. Potential effects to these topic areas are summarized in EIR Section 5.0, *Other CEQA Considerations*.



## 1.6.2 EIR FORMAT AND CONTENT

This EIR contains all of the information required to be included in an EIR as specified by CEQA and its Guidelines (California Public Resources Code, Section 21000 et. seq. and California Code of Regulations, Title 14, Chapter 5). CEQA requires that an EIR contain, at a minimum, certain specified content. Table 1-2, *Location of CEQA Required Topics*, provides a reference guide for locating the CEQA-required sections within this document. This EIR is organized as follows:

**Table 1-2 Location of CEQA Required Topics**

CEQA Required Topic	State CEQA Guidelines Reference	Location in this EIR
Table of Contents	§ 15122	Table of Contents
Summary	§ 15123	Section S.0
Project Description	§ 15124	Section 3.0
Environmental Setting	§ 15125	Section 2.0
Consideration and Discussion of Environmental Impacts	§ 15126	Section 4.0
Significant Environmental Effects Which Cannot be Avoided if the Project is Implemented	§ 15126.2(c)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Project Should it be Implemented	§ 15126.2(d)	Subsection 5.2
Growth-Inducing Impact of the Project	§ 15126.2(e)	Subsection 5.3
Consideration and Discussion of Mitigation Measures Proposed to Minimize Significant Effects	§ 15126.4	Section 4.0 & Table S-1
Consideration and Discussion of Alternatives to the Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Subsection 5.4
Organizations and Persons Consulted	§ 15129	Section 7.0 & Technical Appendices
Discussion of Cumulative Impacts	§ 15130	Section 4.0
Energy Conservation	§ 15126.2(b) & Appendix F	Subsection 4.4, Subsection 5.4, & Technical Appendix E

- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the City of San Bernardino, serving as the Lead Agency for this EIR, a brief description of the Project, the purpose of the EIR, and an overview of the EIR format.



- **Section 2.0, Environmental Setting**, describes the environmental setting, including descriptions of the Project Site's physical conditions and surrounding context used as the baseline for analysis in this EIR.
- **Section 3.0, Project Description**, serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to State CEQA Guidelines Section 15123. This Section provides a detailed description of the Project, including its location, purpose, main objectives, design features, construction characteristics, and operational characteristics expected over the Project's lifetime. In addition, the discretionary approval actions required of the City of San Bernardino and other government agencies to authorize implementation of the Project are discussed.
- **Section 4.0, Environmental Analysis**, provides an analysis of potential direct, indirect, and cumulatively considerable impacts that may occur with implementation of the Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental changes identified in Section 4.0 and throughout this EIR are referred to as "effects" or "impacts" interchangeably. The State CEQA Guidelines also describe the terms "effects" and "impacts" as being synonymous (State CEQA Guidelines Section 15358).

In each subsection of Section 4.0, the existing conditions are disclosed that are pertinent to the subject area being analyzed, accompanied by a specific analysis of physical impacts that may be caused by implementing the Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The analyses in Section 4.0 are based in part upon technical reports that are appended to this EIR. Information also is drawn from other sources of analytical materials that directly or indirectly relate to the Project and are cited in Section 7.0, *References*. Where the analysis demonstrates that a physical adverse environmental effect may or would occur without undue speculation, feasible mitigation

measures are recommended to reduce or avoid the significant effect. Mitigation measures must be fully enforceable, have an essential nexus to a legitimate governmental interest, and be "roughly proportional" to the impacts of the Project. The discussion then indicates whether the identified mitigation measures would reduce impacts to below a level of significance. If mitigation measures are not available or feasible to reduce an identified impact to below a level of significance, the environmental effect is identified as a significant and unavoidable adverse impact, for which a Statement of Overriding Considerations would need to be adopted by the City of San Bernardino pursuant to State CEQA Guidelines Section 15093.



- **Section 5.0, Other CEQA Considerations**, includes specific topics that are required by CEQA. These include a summary of the Project’s significant and unavoidable environmental effects, a discussion of the significant and irreversible environmental changes that would occur should the Project be implemented, as well as potential growth-inducing impacts of the Project. Section 5.0 also includes a discussion of the environmental subjects that were found not to be significant during preparation of the Initial Study and this EIR.
- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the Project that could reduce or avoid the Project’s adverse environmental effects. CEQA does not require an EIR to consider every conceivable alternative to the Project but rather to consider a reasonable range of alternatives, including a “No Project” alternative that will foster informed decision making and public participation.
- **Section 7.0, References**, cites the reference sources used in preparing this EIR and lists the agencies and persons that were consulted in preparing this EIR. Section 7.0 also lists the persons who authored or participated in preparing this EIR.

## 1.7 INCORPORATION BY REFERENCE

State CEQA Guidelines Section 15147 states that the “information contained in an EIR shall include summarized...information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public,” and that the “[p]lacement of highly technical and specialized analysis and data in the body of an EIR shall be avoided through the inclusion of supporting information and analyses as appendices to the main body of the EIR.” State CEQA Guidelines Section 15150 allows for the incorporation “by reference all or portions of another document... [and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand.” The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this EIR. Refer to EIR Section 7.0, *References*, for a list of documents incorporated into this EIR by reference.

This EIR also relies on a number of Project-specific technical reports that are bound separately as Technical Appendices. The individual technical studies, reports, and supporting documentation that comprise the Technical Appendices are as follows:

<b>A</b>	Initial Study, Notice of Preparation, and Written Comments on the NOP
<b>B</b>	FAA No Hazard to Air Navigation
<b>C1</b>	Air Quality Impact Analysis
<b>C2</b>	Health Risk Assessment
<b>D</b>	Biological Technical Report
<b>E</b>	Cultural Resources Evaluation



<b>F</b>	Energy Analysis
<b>G1</b>	Geotechnical Evaluation
<b>G2</b>	Infiltration Testing
<b>H</b>	Greenhouse Gas Emissions Analysis
<b>I</b>	Phase I Environmental Site Assessment
<b>J1</b>	Preliminary Drainage Report
<b>J2</b>	Water Quality Management Plan
<b>K</b>	Noise Impact Analysis
<b>L1</b>	Traffic Impact Analysis
<b>L2</b>	Vehicle Miles Traveled (VMT) Analysis
<b>M</b>	Engineering Analysis Report
<b>N</b>	Site Lighting Plan
<b>O</b>	Sanitary Sewer Memorandum

Other reference sources that were used to inform this EIR are listed in Section 7.0, *References*. In most cases, documents and other sources of information not included in the EIR's Technical Appendices are cited for convenience in Section 7.0 by a link to the online location where the document/website can be viewed. Cited material also is on file with the City of San Bernardino serving as the CEQA Lead Agency. The Project's Technical Appendices and other references relied upon by this EIR are available for public review at the City of San Bernardino Planning Division, 201 North E Street, 3<sup>rd</sup> Floor, San Bernardino, CA 92401, during the City's regular business hours, or can be requested in electronic form by contacting the City Planning Division.

## **1.8 POTENTIAL AREAS OF CONTROVERSY**

Substantive issues raised in response to this EIR's NOP were previously summarized in Table 1-1. Based on comments received in response to the NOP, concerns were raised regarding potential impacts to the environment pertaining to the topics of air quality, greenhouse gas emissions, cultural resources, tribal cultural resources, and land use. No other areas of concern or controversy were identified pertaining to the proposed Project, beyond comments regarding the Project's potential environmental effects summarized in Table 1-1.

## **1.9 ISSUES TO BE RESOLVED BY THE DECISION-MAKING BODY**

The primary issue to be resolved by the decision-making body for the proposed Project involves the Project's significant and unavoidable impact in the environmental topic area of Transportation (due to the Project's Vehicle Miles Traveled (VMT)), which is addressed in EIR Subsection 4.8, *Transportation*. The City of San Bernardino's D/ERC will evaluate whether the mitigation measures presented in this document to reduce the Project's unavoidable environmental impact to VMT adequately reduces the impact to the maximum feasible extent. The D/ERC also will determine whether the Project's benefits outweigh the adverse environmental effects in support of adopting a Statement of Overriding Considerations pursuant to State CEQA Guidelines



Section 15093. Finally, the D/ERC will decide whether to dismiss the Project alternatives in favor of approving the proposed Project, considering the feasibility of each alternative, the Project's objectives, and whether such the alternatives would substantially reduce or avoid the Project's significant VMT impact.



## 2.0 ENVIRONMENTAL SETTING

### 2.1 REGIONAL SETTING AND LOCATION

The Project Site is located in the City of San Bernardino, which is located within the Valley subregion of San Bernardino County. The City of San Bernardino is situated north of the City of Loma Linda, northwest of the City of Redlands, west and south of the City of Highland, south of the San Bernardino Mountains, and east of the City of Rialto. The Project Site is located approximately 3.3 miles east of Interstate 215 (I-215), approximately 2.1 miles west of the 5<sup>th</sup> Street on/off-ramp to Interstate-210 (I-210), and approximately 2.8 miles north of Interstate-10 (I-10). The Site's location and regional context are shown on Figure 2-1, *Regional Map*.

The Project Site is located in an urbanizing area of southern California commonly referred to as the "Inland Empire." The Inland Empire is an approximately 28,000 square-mile region comprising Riverside County, San Bernardino County, and the eastern tip of Los Angeles County. According to U.S. Census data, the 2022 population of San Bernardino County was estimated at 2,193,656 (USCB, 2022). The Southern California Association of Governments (SCAG) forecast models predict that the population of San Bernardino County will grow to approximately 2,815,000 persons by the year 2045 (SCAG, 2020a, Demographics and Growth Forecast Technical Report, Table 13).

### 2.2 LOCAL SETTING AND LOCATION

The Project Site is located north of 5<sup>th</sup> Street, south of 6<sup>th</sup> Street, east of Sterling Avenue, and approximately 0.1 mile west of Lankershim Avenue, as illustrated on Figure 2-2, *Vicinity Map*, and Figure 2-3, *USGS Topographic Map*. Access to the Project Site is provided by Sterling Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street, which abut the Site. The Project Site encompasses Assessor's Parcel Number (APN) 1192-211-01.

The census tract containing the Project Site (Census Tract 6071007601) is ranked by the State as being in the 48<sup>th</sup> percentile for pollution burden which, based on the Census Tract's demographic characteristics, results in the Office of Environmental Health Hazard Assessment (OEHHA) ranking the area in the 82<sup>nd</sup> percentile of communities that are disproportionately burdened by multiple sources of pollution. OEHHA relies on reported demographic information of 7,655 persons living in Census Tract 6071007601. Census Tract 6071007601 encompasses areas north of 3<sup>rd</sup> Street, east of Sterling Avenue, south of Baseline Street, and west of Victoria Avenue. (OEHHA, 2023)

OEHHA's California Communities Environmental Health Screening Tool: CalEnviroScreen 4.0, is a screening methodology that the State uses to identify California communities that are disproportionately burdened by multiple sources of pollution. The CalEnviroScreen 4.0 indicators for the Project site's Census Tract are shown below in Table 2-1, *CalEnviroScreen Indicators for Census Tract 6071007601*.



Table 2-1 CalEnviroScreen Indicators for Census Tract 6071007601

Indicator	% Burden	Indicator	% Burden
<b>Exposures</b>		<b>Sensitive Populations</b>	
Ozone:	100	Asthma	71
PM 2.5:	57	Low Birth Weight	80
Diesel PM:	25	Cardiovascular Disease	76
Pesticides:	0	<b>Socioeconomic Factors</b>	
Toxic Releases:	48	Education	92
Traffic:	16	Linguistic Isolation	83
Drinking Water Contaminants:	85	Poverty	95
Lead in Housing:	84	Unemployment	98
<b>Environmental Effects</b>		Housing Burden	96
Cleanup Sites	71		
Groundwater Threats	3		
Hazardous Waste	17		
Impaired Waters	12		
Solid Waste	10		

(OEHHA, 2023)

Exposure indicators are based on measurements of different types of pollution that people may come into contact with. Environmental effects indicators are based on the locations of toxic chemicals in or near communities. Sensitive population indicators measure the number of people in a community who may be more severely affected by pollution because of their age or health. Socioeconomic factor indicators are conditions that may increase people's stress or make healthy living difficult and cause them to be more sensitive to pollution's effects. As indicated in Table 2-1, for the Project Site's Census Tract, the highest environmental exposures (over 80%) are from ozone (O<sub>3</sub>), drinking water contamination, and lead in housing. The highest population and socioeconomic factors (over 80%) include compromised health conditions related to low levels of educational attainment, linguistic isolation, poverty, unemployment, and housing burden. None of the other population or socioeconomic factors exceed 80%. It should be noted that the data presented in Table 2-1 are based on air quality measurements collected in 2016 and 2018, and do not necessarily represent current conditions. As discussed in further detail in EIR Subsection 4.1.1.E, air quality regulations have become increasingly stringent since the 1970s, which has resulted in a substantial reduction in industrial emission sources, including localized emission sources. Thus, the data presented in Table 2-1 likely overstates the Project area's level of environmental exposures. (OEHHA, 2023)

In addition, the Project Site is located in a SB 535 Disadvantaged Community identified by the California Environmental Protection Agency (CalEPA). The State provides California Climate Investment funding appropriated by the State Legislature from the proceeds of the State's Cap-and-Trade Program for investment in disadvantaged communities. The funding is used for programs that reduce emissions of greenhouse gases with at least 25% of the funding going to projects that provide a benefit to disadvantaged communities and at least 10 percent of the funding going to projects located within those communities. (CalEPA, 2022)

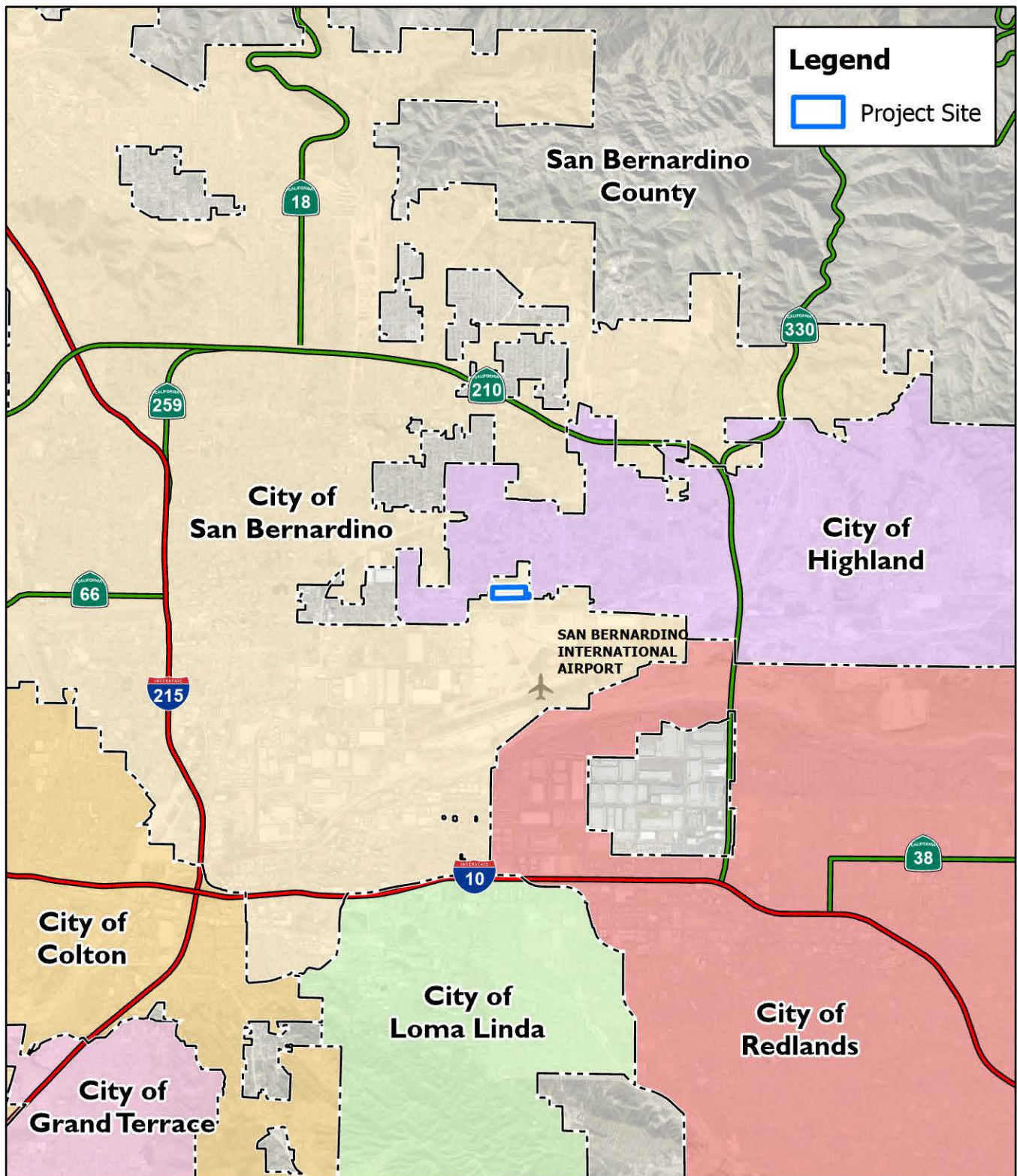


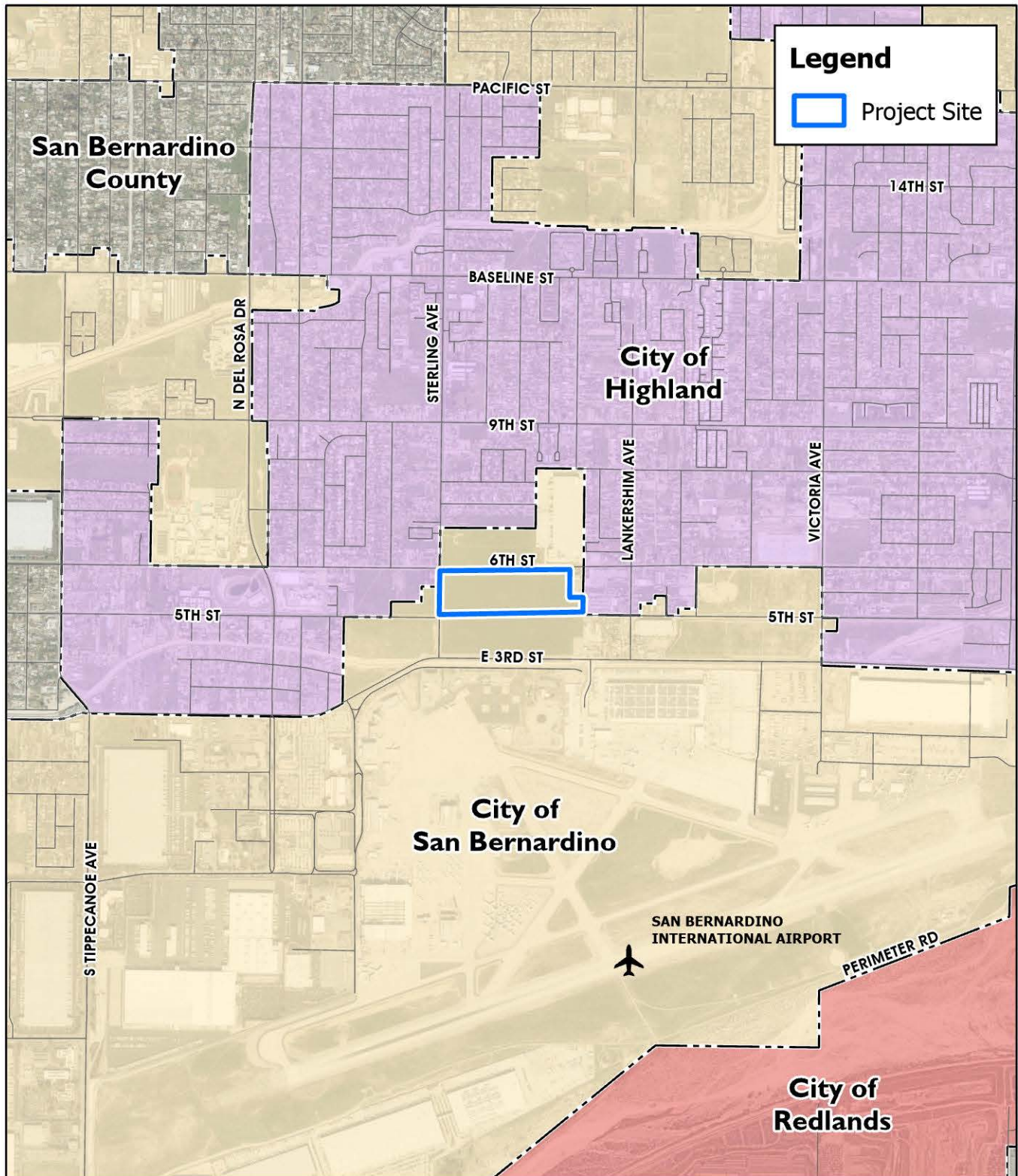
Figure 2-1



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Miles

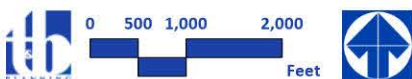


Regional Map

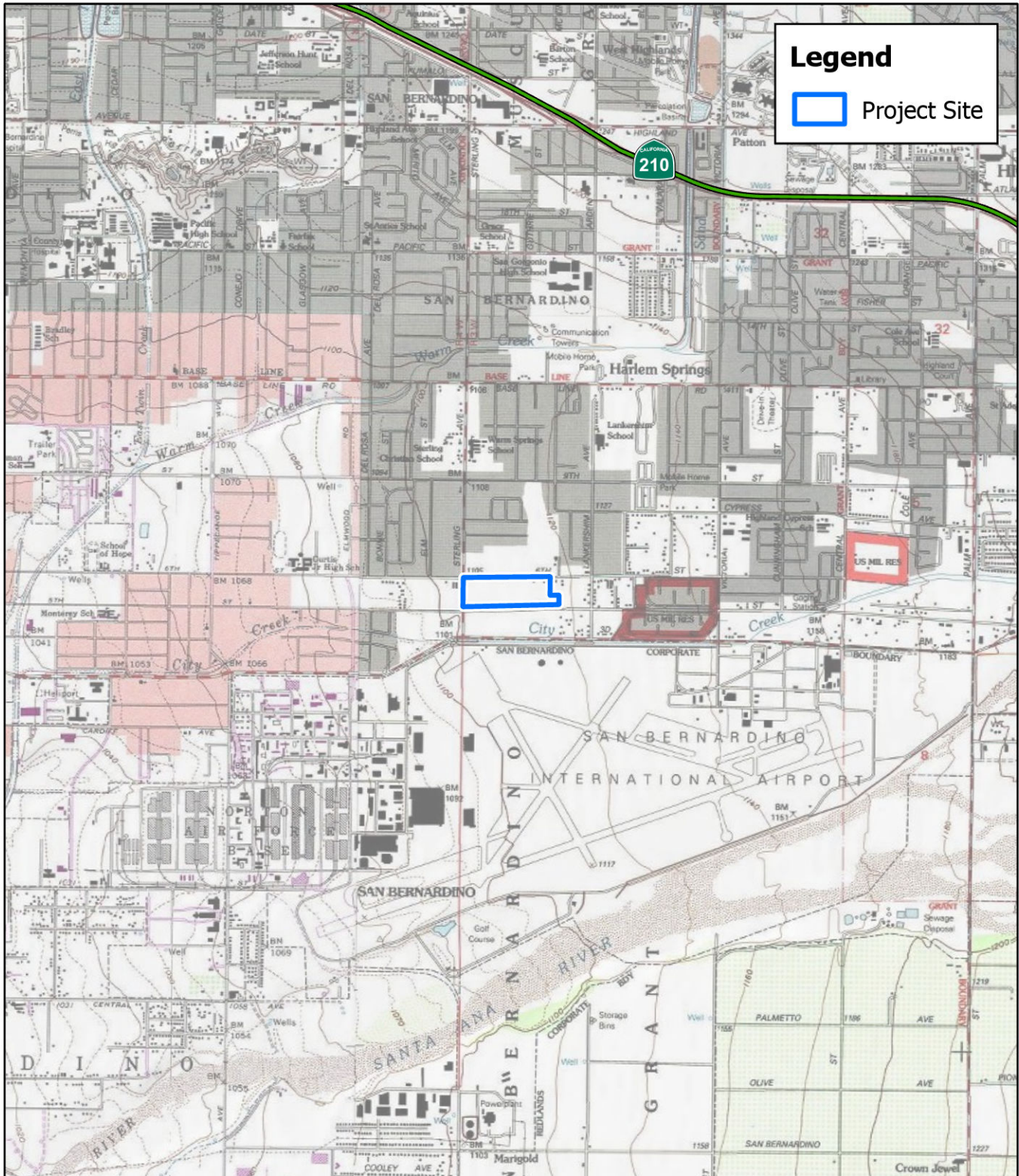


Source(s): Esri, SB County (2023)

Figure 2-2



Vicinity Map



Source(s): Esri, USGS (2013)

Figure 2-3



USGS Topographic Map



## 2.3 SURROUNDING LAND USES

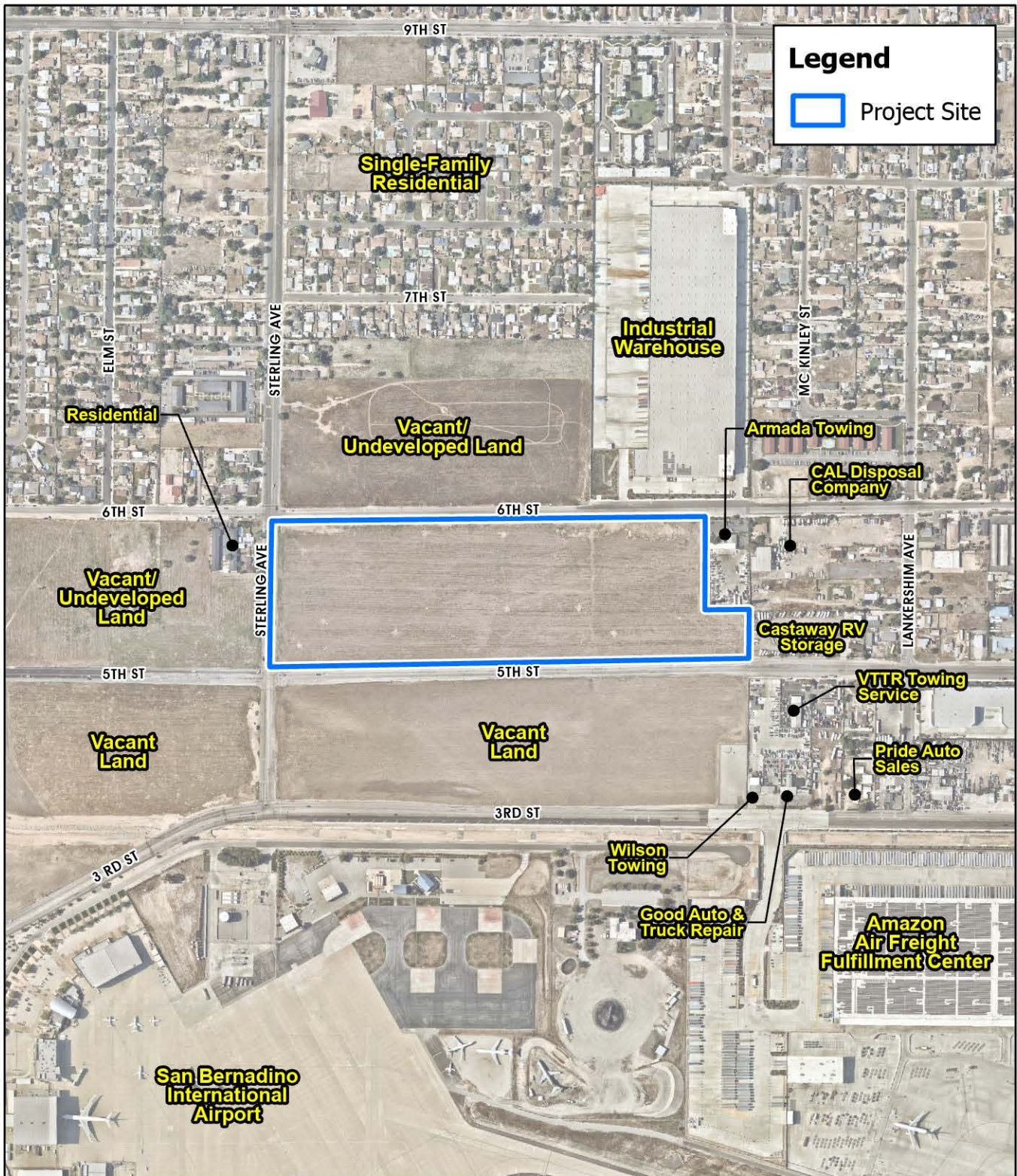
Existing land uses in the immediate vicinity of the Project Site are illustrated on Figure 2-4, *Surrounding Land Uses*, and are described below.

- North: Immediately north of the Project Site is 6<sup>th</sup> Street, beyond which is an existing industrial warehouse (Glob Electric/Weber Logistics), to the west of which is vacant, undeveloped land. Residential land uses, comprising both single-family homes and apartments, are situated to the northeast and northwest, but they do not directly abut the Project Site. North of the Project Site along Sterling Avenue, for a distance of approximately 0.62 miles along the alignment of an off-site underground electrical line that would need to be installed to service the Project, are a mixture of vacant lots, single-family and multi-family homes and apartments, churches, Highland Fire Department Station 543, Warms Springs Elementary School automobile repair and service stations, and general commercial uses.
- East: To the east of the Project Site are Armada Towing, CAL Disposal Company, Inc. (a garbage collection service) and Castaway RV Storage. Single-family residential homes are located at the northwest corner of the intersection of 5th Street and Lankershim Avenue and do not abut the Project Site. Further east of Lankershim Avenue are additional single-family residential areas, the Highlanders Boxing Club Program (a boxing gym), and the Highland Storage facility.
- South: To the south of the Project Site is 5<sup>th</sup> Street, beyond which is vacant and undeveloped land and 3<sup>rd</sup> Street. Further to the south of 3<sup>rd</sup> Street is the San Bernadino International Airport and an Amazon Air Freight Fulfillment Center. To the southeast of the Project site are a number of businesses providing auto/truck repair and towing services, with residential uses occurring further to the southeast. To the southwest of the Project Site is Sterling Avenue, beyond which is vacant and undeveloped land which is zoned Commercial General - 1.
- West: Immediately west of the Project Site is Sterling Avenue, to the west of which is vacant and undeveloped land. Situated at the southwest corner of 6<sup>th</sup> Street and Sterling Avenue are an apartment complex and two single-family residential homes, which do not abut the Project Site. Further to the west are additional residential uses including apartments and single-family residential, an industrial facility, and the Sterling Natural Resource Center.

## 2.4 PLANNING CONTEXT

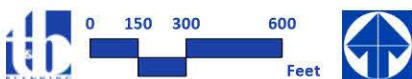
### 2.4.1 CITY OF SAN BERNARDINO GENERAL PLAN

The City of San Bernardino's prevailing planning document is its General Plan, dated November 1, 2005. As depicted on Figure 2-5, *Existing General Plan Land Use Map*, the City's General Plan designates the Project Site as "Industrial Light (IL)." The General Plan intends for the "IL" land use designation to provide for a variety of light industrial uses, including warehousing/distribution, assembly, light manufacturing, research and development, mini storage, and repair facilities conducted within enclosed structures as well as supporting retail and personal uses. The General Plan indicates that "IL" land uses may be developed at a Floor Area Ratio (FAR) of up to 0.75. (City of San Bernardino, 2005a, p. 2-19). The City is undertaking a comprehensive

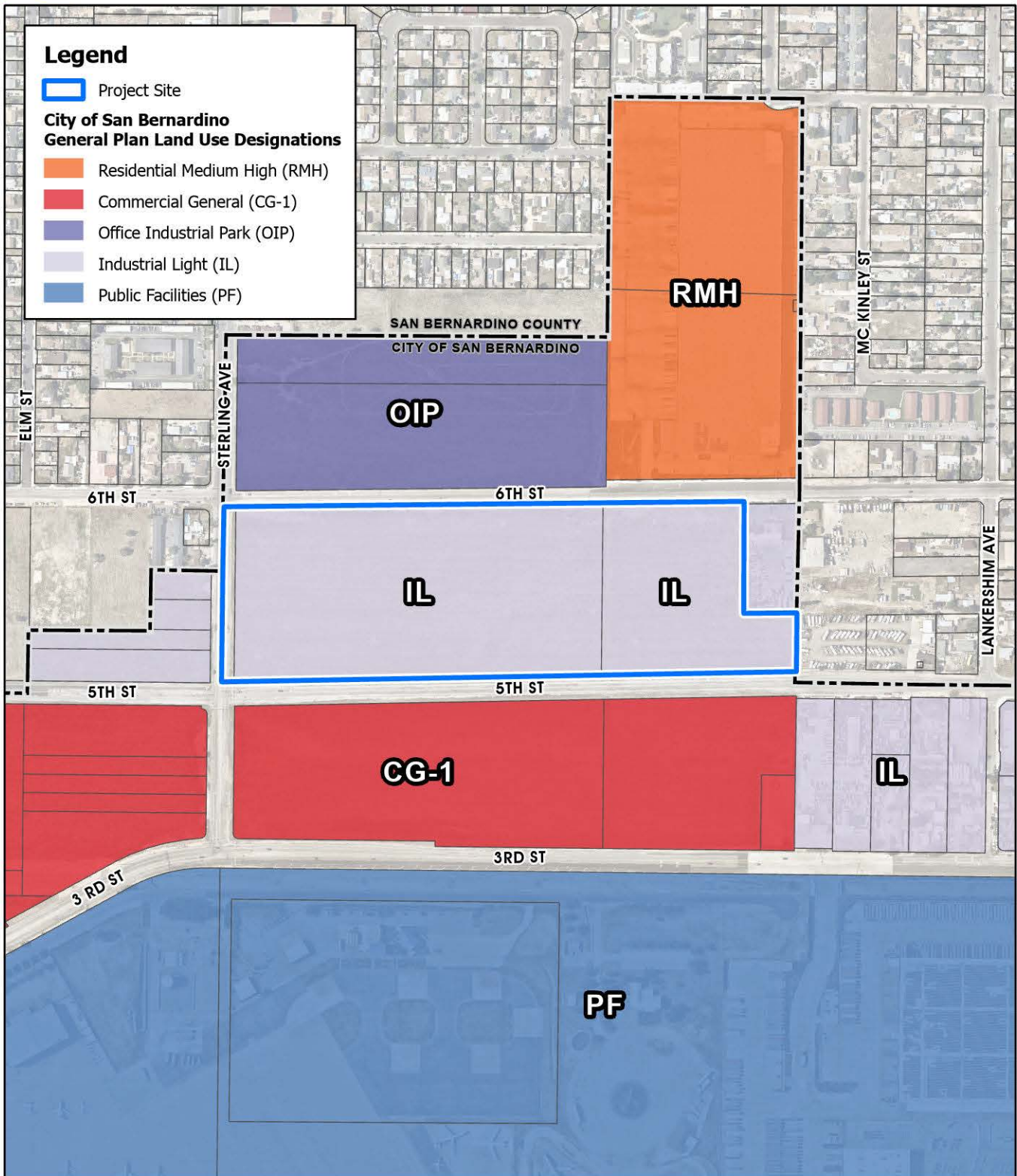


Source(s): Esri, Nearmap Imagery (May 2023)

Figure 2-4

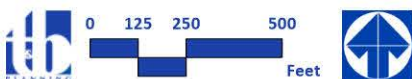


## Surrounding Land Uses



Source(s): City of San Bernardino (2005), Esri, Nearmap Imagery (May 2023)

Figure 2-5



## Existing General Plan Land Use Map



update to its General Plan, but because the update was not publicly available or adopted at this time this EIR was prepared, the 2005 General Plan is the operative General Plan document for purposes of analysis herein.

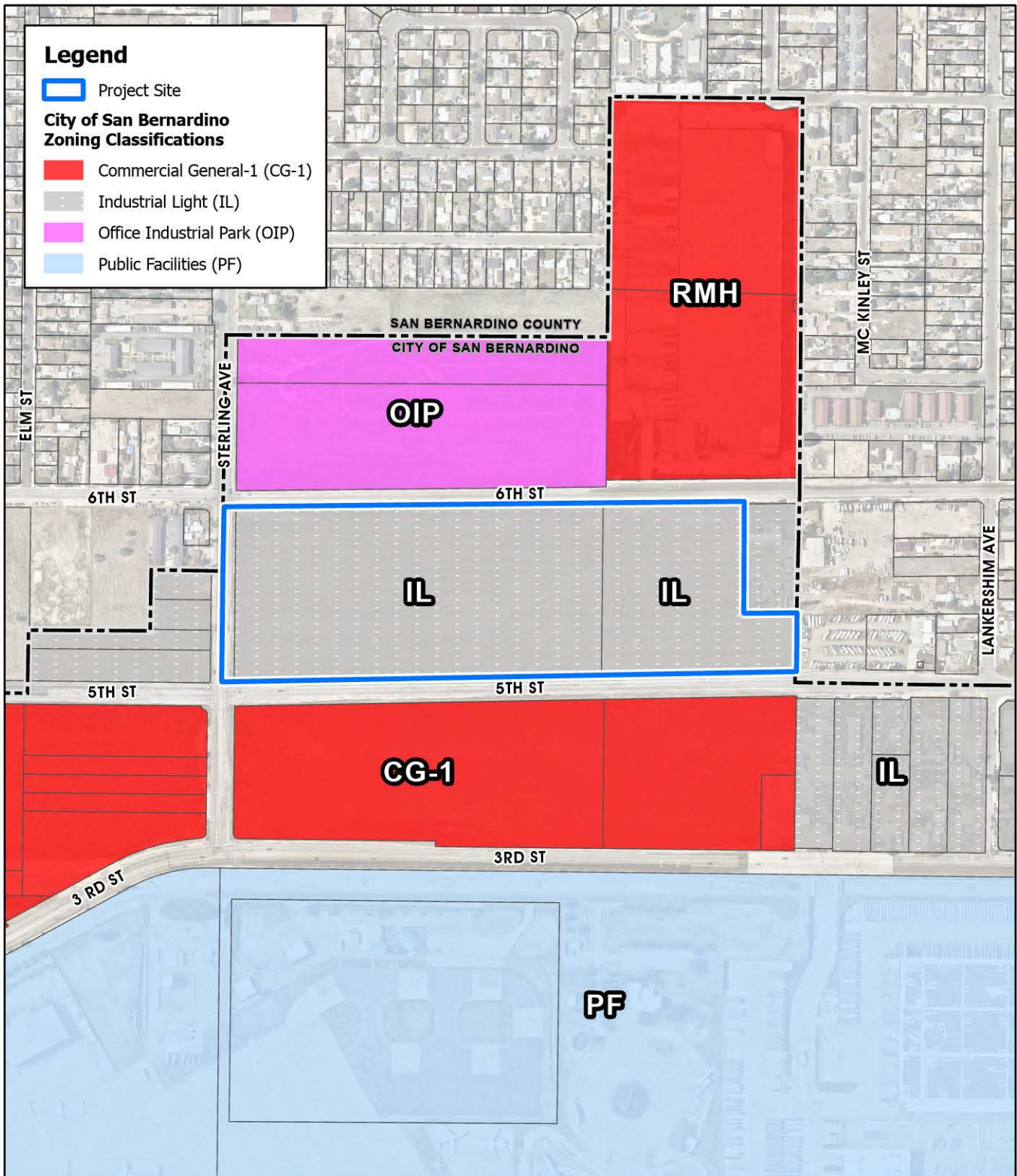
## 2.4.2 ZONING

The City of San Bernardino Municipal Code Title 19 (Land Use/Subdivision Regulations) establishes zoning requirements and development standards to regulate the use of land and development within the City. As shown on Figure 2-6, *Existing Zoning*, the Project Site is zoned “Industrial Light (IL).” The intent of the IL zoning classification is to retain, enhance, and intensify existing and provide for the new development of lighter industrial uses along major vehicular, rail, and air transportation routes serving the City. (City of San Bernardino, 2023, Chapter 19.08)

## 2.4.3 SCAG REGIONAL TRANSPORTATION PLAN / SUSTAINABLE COMMUNITIES STRATEGY

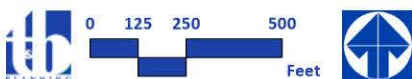
The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. The Project site is within SCAG’s regional authority.

In April 2024, SCAG’s Regional Council adopted the *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (“Connect SoCal”). Connect SoCal is the applicable Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region, inclusive of the Project Site. Connect SoCal embodies a collective vision for the region’s future, prepared with input by local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses, and stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. Connect SoCal plans for a large number of 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 CTCs and seek to reduce traffic bottlenecks, improve the efficiency of the region’s network, and expand mobility choices. The goals of Connect SoCal are to: 1) build and maintain an integrated multimodal transportation network; 2) develop, connect and sustain communities that are livable and thriving; 3) create a healthy region for the people of today and tomorrow; and 4) support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region. Regional planning policies focus on mobility, communities, environment, and economy. The mobility focus is further described to focus on reliable forms of travel besides driving, transportation safety, a just and clean transition to clean transportation technology, and funding for operation of the transportation system. The communities focus is further described to focus on housing affordability, the unhoused population, out-migration, and sustainable growth. The environment focus is further described to focus on sustainable development, air quality, clean transportation, natural and agricultural lands preservation, and climate resilience. The economy focus is further described to focus on goods movement, broadband, universal basic mobility, workforce development, and tourism. (SCAG, 2024a)



Source(s): City of San Bernardino (2005), Esri, Nearmap Imagery (May 2023)

Figure 2-6



Existing Zoning



#### 2.4.4 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY MANAGEMENT PLAN (AQMP)

Currently, the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are exceeded in most parts of the South Coast Air Basin (SCAB). In response, and in conformance with California Health and Safety Code Section 40702 et seq. and the California Clean Air Act, the South Coast Air Quality Management District (SCAQMD) has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. In December 2022, the SCAQMD released the Final 2022 AQMP (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act (CAA) requirements.<sup>1</sup> The 2022 AQMP is based on assumptions provided by the EMISSION FACTOR model (EMFAC) developed by the California Air Resources Board (CARB) for motor vehicle information and assumptions provided by SCAG for demographics. The air quality levels projected in the 2022 AQMP are based on the assumption that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2020 RTP/SCS.<sup>2</sup> The 2022 AQMP also assumes that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development. (SCAQMD, 2022)

### 2.5 EXISTING PHYSICAL SITE CONDITIONS

CEQA Guidelines Section 15125(a)(1) recommends that the physical environmental condition that existed at the time an EIR's NOP is released for public review normally be used as the comparative baseline for the EIR analysis. The NOP for this EIR was released for public review in May 2024, and the following pages include a description of the Project Site's physical environmental condition ("existing conditions") as of that approximate date. Figure 2-7, *Aerial Photograph*, depicts the existing conditions of the Project Site and its surroundings. More information regarding the Project's Site's environmental setting as it relates to a specific environmental issue area is provided in the specific subsections of EIR Section 4.0, *Environmental Analysis*.

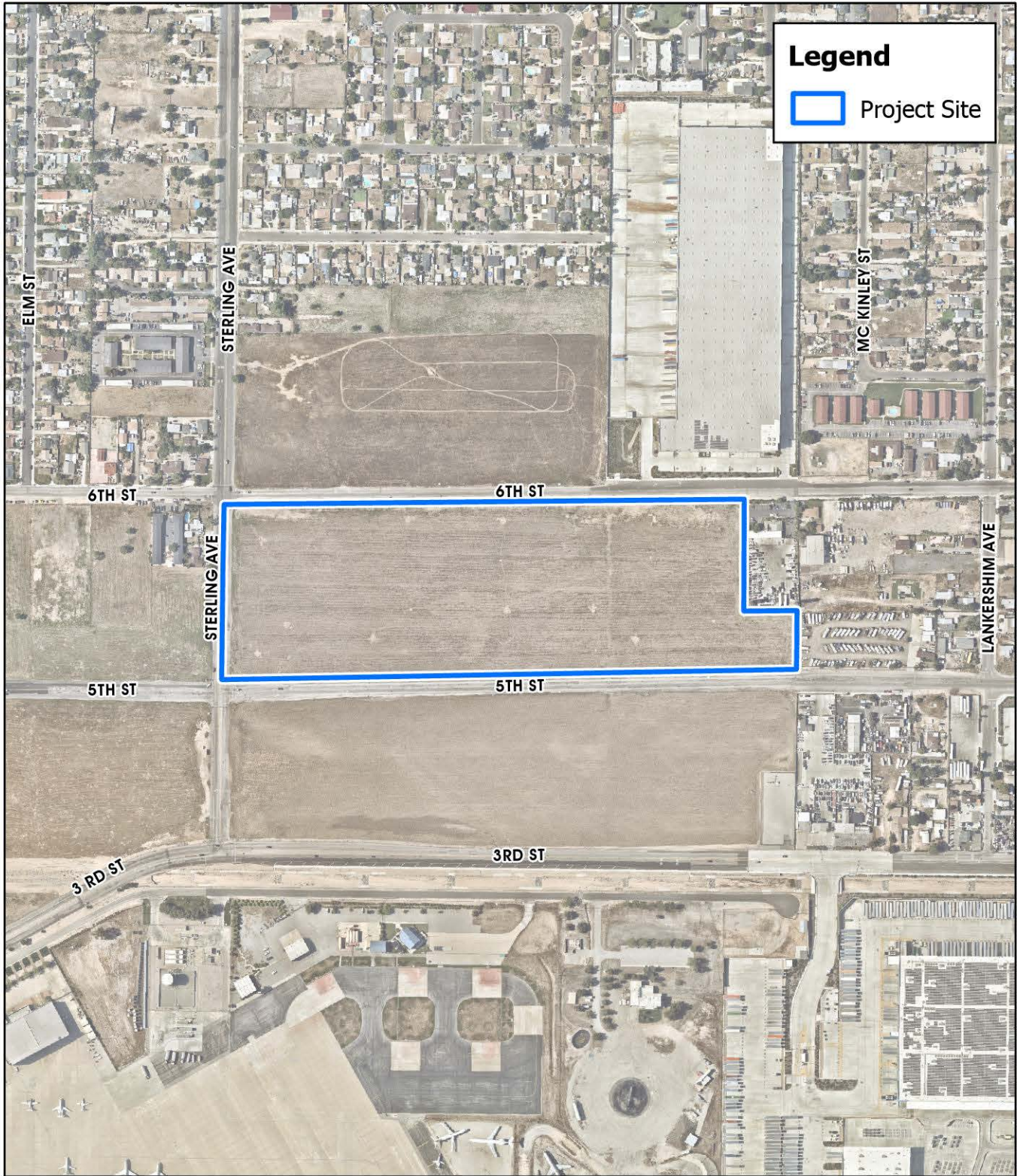
#### 2.5.1 LAND USE

The Project Site is located in the southeastern portion of the City of San Bernardino, which is primarily urban in character. As shown on Figure 2-4, the Project site is vacant and undeveloped under existing conditions and

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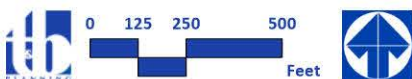
<sup>1</sup> It is acknowledged that SCAG adopted the 2024-2050 RTP/SCS in April 2024. However, the 2022 AQMP is reliant upon the 2020-2045 RTP/SCS. The Project Site was designated "Industrial Light (IL)" by the City of San Bernardino General Plan as considered by both the 2020-2045 RTP/SCS and the 2024-2050 RTP/SCS. As such, the Project Site's land use assumption was the same under both versions of the RTP/SCS.

<sup>2</sup> *Ibid.*



Source(s): Esri, Nearmap Imagery (May 2023)

Figure 2-7



Aerial Photograph



contains generally disturbed vegetation communities that are regularly subject to discing for fire abatement purposes. The Project Site formerly was in agricultural use until 1949, when it was developed with five residential structures. By 1968, the residential structures were demolished and the Project Site has remained vacant and undeveloped since that time. (Ninyo & Moore, 2023, p. 11) The San Bernardino International Airport (SBIA) is located to the south of the Project Site and south of 3<sup>rd</sup> Street. The westernmost portion of the Project Site is encumbered by an aviation easement in favor of the San Bernardino International Airport Authority (SBIAA).

### **2.5.2 AESTHETICS AND TOPOGRAPHIC FEATURES**

As shown on Figure 2-3, *USGS Topographic Map*, the topography of the Project Site is characterized by flat to gently sloping land. Immediately surrounding areas also are flat with no prominent slopes or hillsides. The elevation of the Project Site ranges from 1,122 feet above mean sea level (amsl) in the eastern portion of the Project Site to 1,106 feet amsl in the western portion of the Project Site (Kimley Horn, 2023a, p. 2-1). There are no rock outcroppings or other unique topographic or aesthetic features present on the property or in the immediate vicinity of the Project Site (Google Earth, 2023). There is no lighting on the Project Site; however, there is street pole lighting at the intersections of 5<sup>th</sup> Street and Sterling Avenue and 6<sup>th</sup> Street and Sterling Avenue, and along 6<sup>th</sup> Street in the vicinity of the industrial property to the north of the Project Site. Additionally, the commercial property adjacent to the east side of the Project Site has outdoor lighting.

### **2.5.3 AIR QUALITY AND CLIMATE**

The Project Site is located in the 6,745-square-mile South Coast Air Basin (SCAB), which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, the San Jacinto Mountains to the north and east; and San Diego County to the south. The SCAB is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and state air quality standards. Although the climate of the SCAB is characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. More than 90% of the SCAB's rainfall occurs from November through April. Temperatures during the year range from an average minimum of 36°F in January to over 100°F maximum in the summer. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Ana(s)" each year. (UC, 2024a, pp. 9-10)

At the regional level, air quality in the SCAB has improved over the past several decades; however, the SCAB is currently not in attainment of state and/or federal standards established for Ozone (O<sub>3</sub>; state one-hour and state and federal eight-hour standards), particulate matter (PM<sub>10</sub> [state standard only] and PM<sub>2.5</sub>), and Lead (only in the Los Angeles County portion of the SCAB). No areas of the SCAB exceeded federal or state standards for nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), or sulfates. (UC, 2024a, p. 21)

Refer to EIR Subsections 4.1, *Air Quality*, and 4.4, *Greenhouse Gas Emissions*, for a more detailed discussion of the existing air quality and climate setting in the Project area.



#### 2.5.4 BIOLOGICAL RESOURCES

The City of San Bernardino including the Project Site is not covered by a regional Habitat Conservation Plan (HCP). In the immediate vicinity of the Project Site, there are no conserved lands for the purpose of biological resource conservation. Based on a biological resources survey of the Project Site conducted by Noreas, three vegetation community/land cover types were observed within the Project Site: Disturbed/Developed, Ruderal, and Non-Native Grassland. Wildlife species observed consisted of commonly-occurring species. No federal or state listed plant species were observed and no USFWS-designated critical habitat for plants are present. The results of the targeted plant species surveys indicate that there are no special status plants present within the Project Site. (Noreas, 2023, p. 5-1)

No federal or state listed wildlife species were observed and the Project Site does not include U.S. Fish and Wildlife Service (USFWS) designated critical habitat for wildlife. The Project Site lacks the essential habitat attributes needed to support special status species (Noreas, 2023, p. 5-2). In summary, the Project Site is not biologically sensitive and does not contribute to significant regional biological resources.

Refer to EIR Subsection 4.2, *Biological Resources*, for a more detailed discussion of the Project Site's biological setting.

#### 2.5.5 CULTURAL RESOURCES & TRIBAL CULTURAL RESOURCES

Based on a Historical/Archaeological Resources Survey Report prepared by CRM TECH, and included as *Technical Appendix E* to this EIR, the Project Site does not contain any known significant historic or archaeological resources as defined by Section 15064.5 of the CEQA Guidelines (CRM Tech, 2023, p. 13). The Project Applicant is an entity of the Yuhaaviatam of San Manuel Nation, a federally recognized tribe. The Project Site is within the Yuhaaviatam of San Manuel Nation's ancestral territory. In addition, Kizh Nation-Gabrieleño Band of Mission Indians, indicates that the Project Site is in their traditional use territory.

The surface sediments on the Project Site and in the Project Site's vicinity are primarily Holocene-age sand and gravel associated with alluvial fans and/or active stream channels (SoCalGeo, 2023a). The origins of these sediments are closely related to City Creek, which once flowed roughly 1,000 feet south of the Project Site prior to channelization (and is now channelized along the northern boundary of the San Bernardino International Airport (SBIA), approximately 600 feet south of the Project Site), and to the Santa Ana River about one mile further to the south, which was historically prone to widespread flooding events before the construction of Seven Oaks Dam upstream and other flood control projects. Given the Project Site's location in the previous floodplains of these waterways, the Project Site's location would not have been considered a favorable environment for long-term settlement in prehistoric times, nor would the setting be conducive for the preservation of subsurface archaeological deposits.

Refer to EIR Subsections 4.3, *Cultural Resources*, and 4.9, *Tribal Cultural Resources*, for a more detailed discussion of the existing cultural and tribal cultural resource settings of the Project Site.



### 2.5.6 GEOLOGY

The Project Site is located in a seismically active area of Southern California, although no faults or fault zones cross the Site. The Site is subject to periodic ground shaking and other indirect geologic hazards during seismic events. Based on a geotechnical evaluation conducted by Southern California Geotechnical (SCG), artificial fill soils are located at the ground surface of the Project Site and extend to depths of 2 to 5.5 feet below the surface. The fill soils generally consist of very loose to medium dense silty sands, sandy silts, and sands with varying amounts of silt and fine gravel. Native alluvial soils exist beneath the artificial fill soils, extending to at least 50 feet beneath the surface. The near surface alluvium generally consists of medium dense to very dense silty sands, sandy silts, and poorly- to well-graded sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to depths of 12 to 25± feet below existing site grades. Deeper alluvial soils consist of dense to very dense silty sands, sandy silts and poorly-graded sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to the maximum depth explored of 50± feet below the site grades. (SoCalGeo, 2023a, pp. 5-6) Based on water level measurements and the moisture contents of soil samples, the static groundwater table was considered to have existed at a depth of ±37 feet below the surface, at the time of the subsurface investigation. (SoCalGeo, 2023a, p. 6)

Refer to EIR Subsection 4.4, *Geology and Soils*, for a more detailed discussion of the existing geologic setting of the Project Site.

### 2.5.7 HYDROLOGY

The Project Site is located in the Santa Ana River watershed, which drains an approximately 2,650-square-mile area and is the principal surface flow water body within the region. The Santa Ana River starts in Santa Ana Canyon in the southern San Bernardino Mountains and runs southwesterly across San Bernardino, Riverside, and Orange Counties, and discharges into the Pacific Ocean at the City of Huntington Beach. The Santa Ana River is located more than a mile south of the Project Site. The Project Site and vicinity are within the purview of the Santa Ana Regional Water Quality Control Board (RWQCB). The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region, which sets forth goals and objectives for protecting water quality within the region (RWQCB, 2019, p. 1.1).

Under existing conditions, stormwater flows from the Project Site travel as sheet flows from east to west and discharge to Sterling Avenue. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C8701J, the Project Site is located within "Flood Zone X (unshaded)," which includes "areas determined to be outside the 0.2% annual chance floodplain" (FEMA, 2016).

### 2.5.8 NOISE

Primary noise sources in the vicinity of the Project Site include vehicular noise, operational noise from business enterprises, and aircraft noise associated with the San Bernardino International Airport (SBIA). Urban Crossroads recorded 24-hour noise readings at five locations in the Project Site's vicinity to determine the baseline existing noise environment. Measured daytime noise levels in the area ranged from 59.2 equivalent level decibels (dBA  $L_{eq}$ ) to 66.8 dBA  $L_{eq}$  and nighttime noise levels ranged from 53.1 dBA  $L_{eq}$  to 64.3 dBA  $L_{eq}$  (UC, 2023e, p. 26).



Refer to EIR Subsection 4.7, *Noise*, for a more detailed discussion of the existing noise setting in the Project area.

## **2.5.9 TRANSPORTATION**

The Project Site is located north of and abutting 5<sup>th</sup> Street, approximately 0.1-mile west of Lankershim Avenue, east of and abutting Sterling Avenue, and south of and abutting 6<sup>th</sup> Street. Existing traffic on nearby roadways consist of both passenger vehicles and trucks passing through the area and traveling to and from nearby land uses. The primary regional vehicular travel routes serving the Project area are I-215, which is located approximately 3.3 miles to the west of the Project Site; I-10, which is located approximately 2.8 miles south of the Project Site; and SR-210, which is located approximately 1.8 miles north and 2.1 miles east of the Project Site (Google Earth, 2023).

There is nominal pedestrian and bicycle activity on the streets abutting the Project Site. The San Bernardino County Transportation Authority (SBCTA) provides vehicle miles traveled (VMT) calculations for baseline and cumulative model conditions for each of its member agencies. The City of San Bernardino's General Plan Buildout VMT is calculated at an estimated 31.60 VMT per service population. (UC, 2023, p. 3)

Refer to EIR Subsection 4.8, *Transportation*, for a more detailed discussion of the Project Site's existing transportation setting.

## **2.5.10 UTILITIES AND SERVICE SYSTEMS**

The San Bernardino Municipal Water Department (SBMWD) provides water and sewer service to the Project area. Currently, water and sewer mains exist beneath 6<sup>th</sup> Street and a water main also is located beneath Sterling Avenue. Wastewater flows in the local area are conveyed to the San Bernardino Water Reclamation Plant (SBWRP), located approximately 3.3 miles southwest of the Project Site. Dry utility connection points are in street frontages adjacent to the Project Site, although the nearest connection point for sufficient electrical service is located approximately 0.62-mile north of the site along Sterling Avenue.

The County of San Bernardino Solid Waste Management Division (SWMD) is responsible for the operation and management of the solid waste disposal system that consists of six regional landfills, eight transfer stations and five community collection centers. The City of San Bernardino has no active landfills but primarily utilizes the San Timoteo and Mid-Valley landfills.

## **2.5.11 RARE AND UNIQUE RESOURCES**

As required by CEQA Guidelines Section 15125(c), the environmental setting should place special emphasis on resources that are rare or unique to that region and would be affected by the Project. Based on the existing conditions of the Project Site and surrounding area described above and discussed in more detail in Section 4.0, *Environmental Analysis*, the Project Site does not contain any resources that are rare or unique to the region.



## **3.0 PROJECT DESCRIPTION**

This Section provides all of the information required of an EIR Project Description by CEQA Guidelines § 15124, including a description of the Project's precise location and boundaries; a statement of the Project's objectives; a description of the Project's technical, economic, and environmental characteristics; and a description of the intended uses of this EIR, including a list of the governmental agencies that are expected to use this EIR in their decision-making processes, a list of the permits and approvals that are required to implement the Project, and a list of related environmental review and consultation requirements.

### **3.1 PROJECT SCOPE**

The Project Applicant (Fifth & Sterling, LLC) applied to the City of San Bernardino for a proposed Development Permit Type-D (DP-D) to entitle a 25.12-gross-acre property located at the northeast corner of 5<sup>th</sup> Street at Sterling Avenue in the City of San Bernardino for the development of a 557,000 square foot (s.f.) high cube warehouse building. The building is designed to include 552,000 s.f. of ground floor space and 5,000 s.f. of mezzanine space with a total of 80 truck docking doors positioned along the southern side of the building. Other proposed physical features include but are not limited to access driveways, surface parking areas, walls, fencing, lighting, utilities, and landscaping. Access to the Project Site would be accommodated by two driveways connecting with 5<sup>th</sup> Street, two driveways connecting with Sterling Avenue, and one driveway connecting with 6<sup>th</sup> Street. Off-site improvements required to support the Project include roadway frontage improvements along 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue and the installation of an underground electrical line that would run along Sterling Avenue north of the Project Site for approximately 0.64-mile to a connection point for electrical service.

### **3.2 REGIONAL SETTING**

The Project Site encompasses 25.12 gross acres and is located within the southeast portion of the City of San Bernardino. Figure 2-1 (previously presented) depicts the Project Site's location within the regional vicinity. As shown, San Bernardino County abuts Inyo County to the north; the states of Nevada and Arizona to the east; Riverside County and Orange County to the south; and Los Angeles County and Kern County to the west. Western San Bernardino County and the City of San Bernardino are located in an urbanizing area of Southern California commonly referred to as the Inland Empire. The Inland Empire is an approximately 28,000 square-mile region comprising western San Bernardino County, western Riverside County, and the eastern reaches of Los Angeles County.

### **3.3 PROJECT LOCATION AND SETTING**

The 25.12-acre Project Site that is the subject of this EIR is located within the City of San Bernardino, which is in the Valley subregion of San Bernardino County, north of I-10, east of I-215, and both south and west of I-210. More specifically, and as previously depicted on Figure 2-2, the 25.12-acre Project Site is located to the immediate north of 5<sup>th</sup> Street, the immediate east of Sterling Avenue, the immediate south of 6<sup>th</sup> Street, and approximately 0.1 mile west of Lankershim Avenue. The Project Site encompasses Assessor's Parcel Number (APN) 1192-211-01.



Under existing conditions, the Project Site is vacant and undeveloped and consists of a relatively flat parcel of land that is regularly disced for fire abatement purposes. The San Bernardino International Airport (SBIA) is located to the south of the Project Site and south of 3<sup>rd</sup> Street, which was the former location of the United States Norton Air Force Base. The westernmost 5.5 acres of the Project Site has a title exception in favor of the IVDA that imposes a building height restriction based on the former Norton Air Force Base; however, the Project Applicant obtained a Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA), which is included as *Technical Appendix B*. This determination was based on the proposed building height. Refer to EIR Subsection 2.0 for a detailed description of the local setting and surrounding land uses.

### **3.4 STATEMENT OF OBJECTIVES**

The underlying purpose and goal of the proposed Project is to develop underutilized property in the City of San Bernardino with an economically viable, employment-generating use consistent with the City's Industrial Light (IL) General Plan and zoning designations. The following objectives are intended to achieve these underlying purposes:

- A. To expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas.
- B. To attract new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment.
- C. To develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property.
- D. To improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities.
- E. To develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that are complementary to other existing and planned industrial developments in the local area.
- F. To attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

### **3.5 PROJECT'S COMPONENT PARTS AND DISCRETIONARY APPROVALS**

The Project involves an application for a DP-D. The approval of the DP-D is the principal discretionary action requested of the City of San Bernardino to implement the Project is described in detail on the following pages.



Additional discretionary and ministerial actions that would be necessary to implement the proposed Project are listed in Table 3-3, *Matrix of Project Approvals/Permits*, at the end of this Section.

### 3.5.1 DEVELOPMENT PERMIT TYPE-D (DP-D 23-13)

DP-D 23-13 is proposed to allow for the development of a 557,000 s.f. high cube warehouse building and associated site improvements on the 25.12-gross-acre Project Site. Detailed components of the proposed DP-D 23-13 are described below.

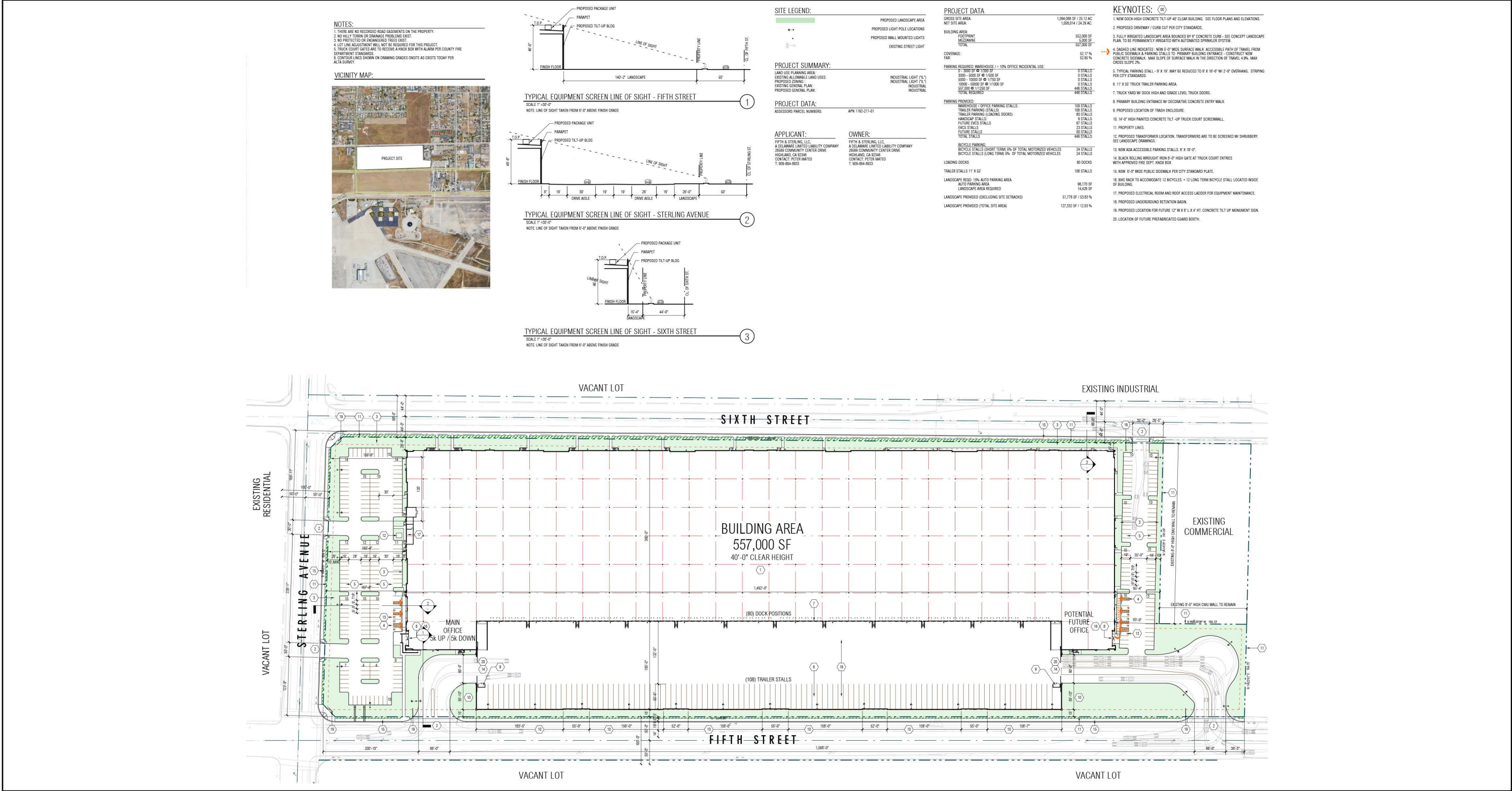
#### A. Site Planning and Building Configuration

Figure 3-1, *Development Permit Type-D No. 23-13 Overall Site Plan*, depicts the overall site plan proposed by the Project Applicant. As shown, DP-D 23-13 would allow for the development of the 25.15-gross-acre Project Site with a proposed 557,000 s.f. warehouse building and associated site improvements. The building is designed to contain up to 557,000 s.f. of interior floor space, which would include up to 552,000 s.f. of ground floor warehouse space and 5,000 s.f. of mezzanine space. While the ultimate user/tenant of the proposed building is not known, the Project Applicant anticipates that the building would be occupied with high-cube transload warehouse uses.

Pedestrian entrances into the proposed building are proposed at the southeast and southwest corners of the building. A total of 80 dock doors and 108 truck trailer parking stalls are proposed on the south side of the building. Approximately 258 passenger vehicle parking spaces (including accessible parking spaces and electric vehicle charging spaces) are proposed on the east and west sides of the building. Any alterations to the number of on-site passenger vehicle and tractor trailer parking spaces proposed by a tenant in the future would be required to comply with the City of San Bernardino's Municipal Code for parking stall number, size and drive aisle access.

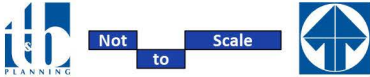
Access to the Project Site would be provided via five proposed driveways: two driveways connecting with Sterling Avenue for passenger vehicles only; two driveways connecting to 5<sup>th</sup> Street, with the western driveway consisting of a right-in/right-out for trucks only and the eastern driveway consisting of a full access driveway for both passenger cars and trucks; and one full access driveway connecting to 6<sup>th</sup> Street for both passenger cars and trucks. Both entrances to the truck court, located on the southern side of the building, would have an eight-foot rolling wrought iron security gate and a location for a future prefabricated guard booth.

The Project design includes Leadership in Energy and Environmental Design (LEED) green building rating system components (published by the U.S. Green Building Council) including a commitment to install a 250-kw photovoltaic solar system on the building roof, which is anticipated to generate up to 365,000 kWh of energy annually. The proposed solar system would reduce fossil fuel use and associated greenhouse gas (GHG) emissions related to the Project's anticipated energy demands. Prior to or shortly after tenant occupancy, the 250-kw solar system is expected to be installed and operational.



Source(s): RGA (April 2024)

Figure 3-1



Development Permit Type-D No. 23-13 Overall Site Plan



**B. Grading and Site Work**

The Project's conceptual grading plan is depicted on Figure 3-2, *Conceptual Grading Plan*. To construct the Project, approximately 81,700 cubic yards (cy) of cut and 81,700 cy of fill would occur as part of the grading operation, resulting in a balance with no import or export of soil materials required. Due to the relatively flat and gently sloping nature of the Project Site, only minor areas of slopes are proposed around the perimeter of the proposed building. The western portion of the site would receive fill and the eastern portion of the site would be cut, with depth of grading extending to approximately 6.5 feet below the current ground surface elevation.

**C. Architectural Design and Perimeter Walls**

Proposed architectural elevations for the building are depicted on Figure 3-3, *Conceptual Building Elevations*. The building would be constructed primarily with concrete tilt-up panels. The building would feature a variable roof line extending from 46.5 feet in height to 50 feet in height at the southeast and southwest corners of the building, as measured from the proposed finished floor. The corners of the building would include glazing (glass) elements. The building would be painted primarily with white and shades of gray, with accent red barn paint proposed to articulate the southeast and southwest corners of the building. A 14-foot-high concrete tilt-up screen wall is proposed along the southern, western, and eastern sides of the proposed truck court on the south side of the Project Site to block views of the building's loading docks from 5<sup>th</sup> Street. Two tile, or other appealing medium, murals are proposed along the Project Site's frontage with 5<sup>th</sup> Street.

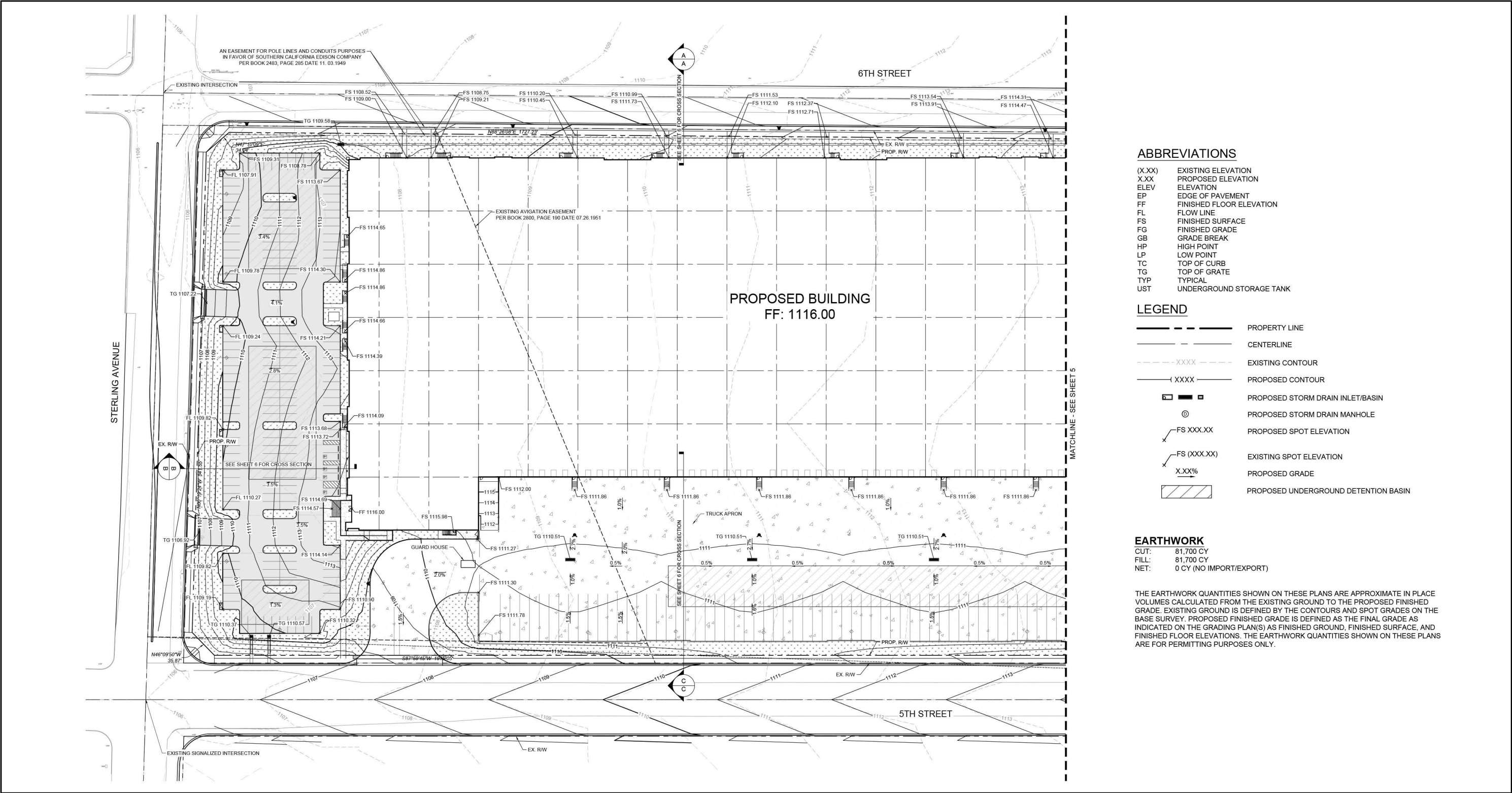
**D. Landscaping**

As depicted on Figure 3-4, *Preliminary Landscape Plan*, landscaping is proposed for the passenger vehicle parking areas, around the perimeter of the building, and along the Site's frontages with Sterling Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street. The proposed landscaping would be ornamental in nature and would feature a mixture of trees, shrubs, and groundcover which are drought tolerant and low maintenance. The landscaping materials along the Site's street frontages are designed with a layering concept to provide different height trees and border or accent shrubs and low ground covers. The landscaped areas would be irrigated as minimally as necessary and include drought-friendly automation technology.

**E. Water, Sewer, and Drainage**

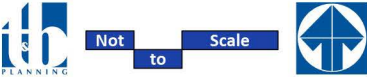
**1. Water Service**

Water service to the proposed building would be provided by the San Bernardino Municipal Water Department (SBMWD). Water service would be provided via one connection at the southwest corner of the building to an existing 24-inch water line running beneath Sterling Avenue. A separate irrigation line also is proposed to extend from the 24-inch water line within Sterling Avenue. In addition, a series of fire hydrants are proposed on-site to the west, south, and east of the proposed building, with additional fire hydrants proposed along the Project Site's frontage with 6<sup>th</sup> Street. Water service for the fire hydrants would be provided from a connection to the 24-inch water line within Sterling Avenue and a connection to a 36-inch water line within 6<sup>th</sup> Street, with on-site fire water lines extending along the western, southern, and eastern sides of the building.

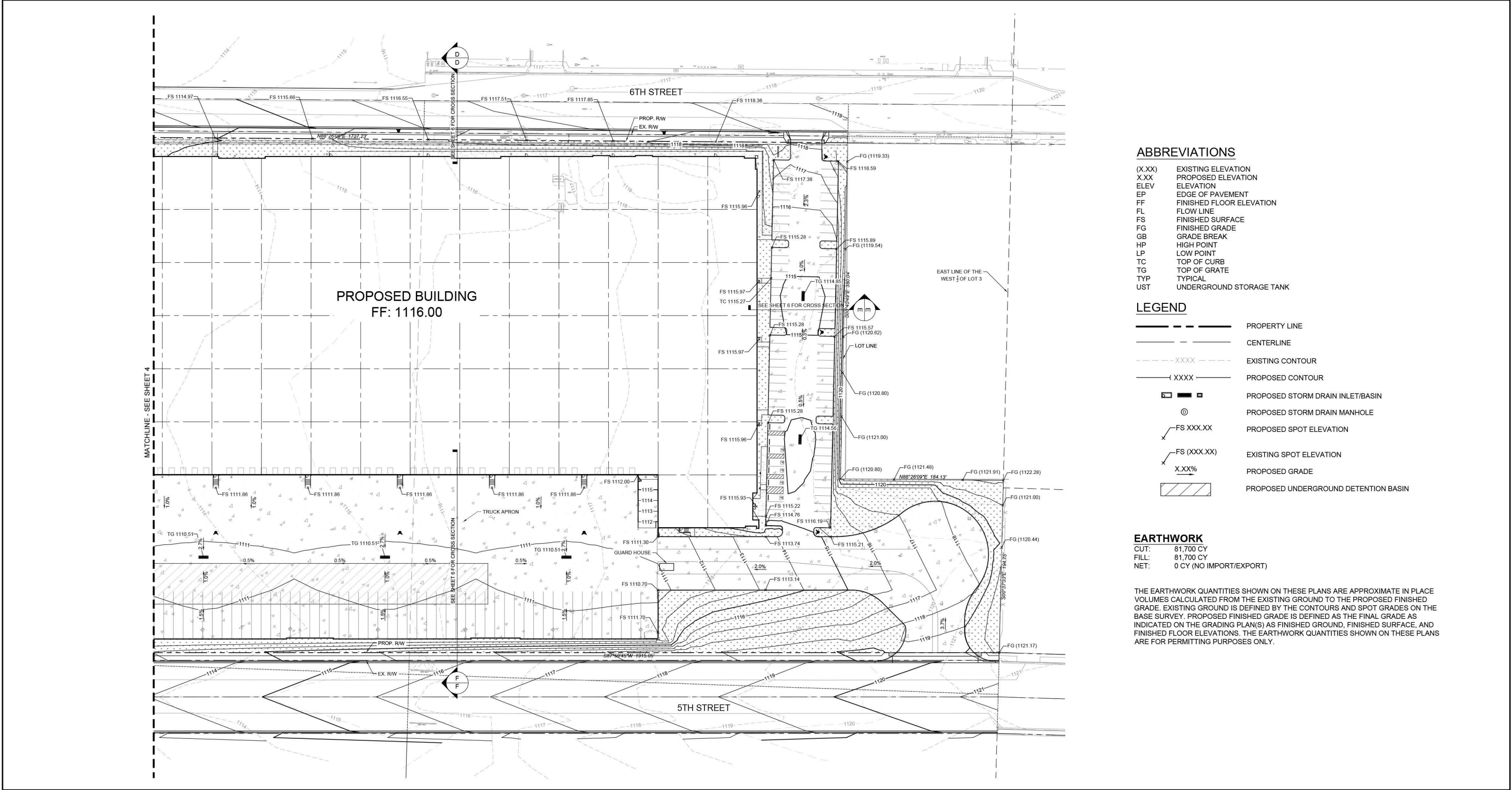


Source(s): Kimley-Horn (01-2-2024)

Figure 3-2

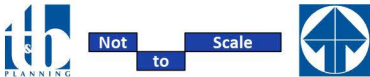


Conceptual Grading Plan-Sheet 1 of 2



Source(s): Kimley-Horn (01-2-2024)

Figure 3-2

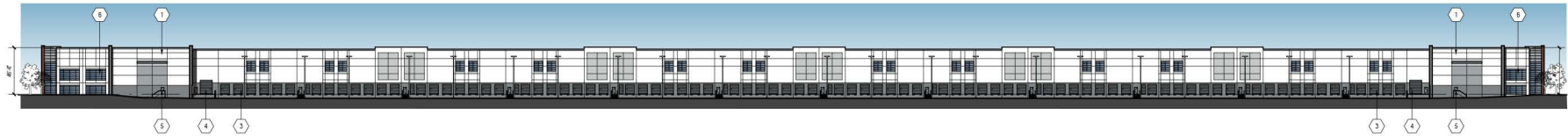




WEST ELEVATION - FACING STERLING AVE.  
SCALE: 1" = 20'-0"



EAST ELEVATION  
SCALE: 1" = 20'-0"



SOUTH ELEVATION - FACING FIFTH STREET  
SCALE: 1" = 10'-0"



NORTH ELEVATION - FACING SIXTH STREET  
SCALE: 1" = 10'-0"



SOUTH ELEVATION WITH SCREEN WALL - FACING FIFTH STREET  
SCALE: 1" = 10'-0"

### FINISH SCHEDULE:

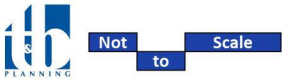
	1. FIELD COLOR SHERWIN WILLIAMS - PURE WHITE SW 7005
	2. LIGHT ACCENT COLOR SHERWIN WILLIAMS - GRAY SCREEN SW 7071
	3. DARK ACCENT COLOR SHWERWIN WILLIAMS - NETWORK SW 7073
	4. DARK ACCENT COLOR SHWERWIN WILLIAMS - SOFTWARE SW 7074
	5. DARK ACCENT COLOR SHERWIN WILLIAMS - RED BARN - SW 7591
	6. GLASS - PRIMARY WINDOW PPG SOLARCOOL PACIFICA

### KEYNOTES

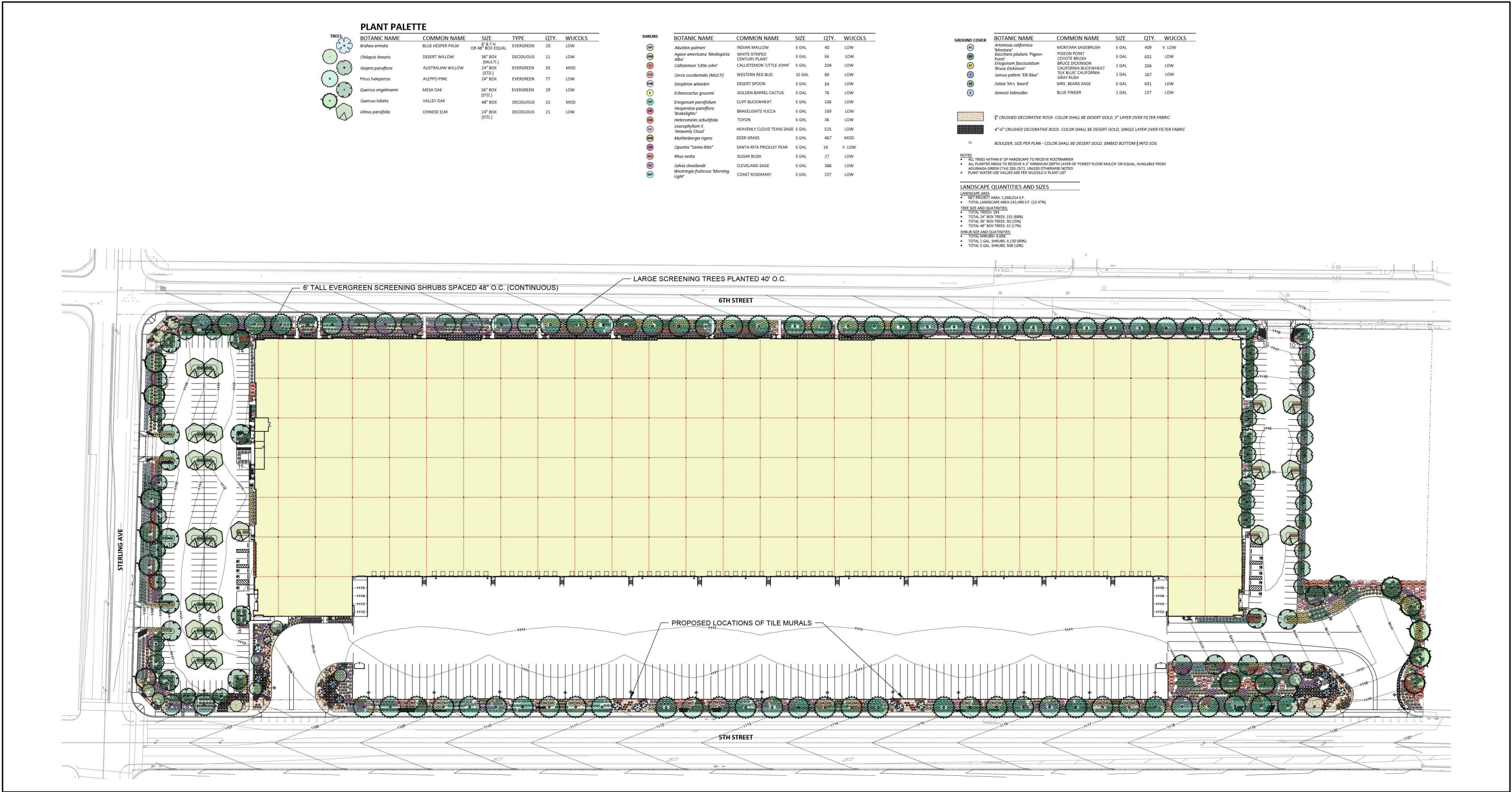
1. PAINTED CONCRETE TILT-UP PANELS.
2. PAINTED CONCRETE TILT-UP SCREEN WALL.
3. PAINTED 9' X 10' DOCK HIGH METAL TRUCK DOORS.
4. PAINTED 12' X 14' GRADE LEVEL METAL TRUCK DOORS.
5. PAINTED METAL ACCESS MAN DOORS.
6. STOREFRONT: BLUE GLAZING SET IN CLEAR ANODIZED ALUMINUM 2" X 4 1/4" MIN. OFF-SET GLAZING SYSTEM

Source(s): RGA (April 2024)

Figure 3-3



### Conceptual Building Elevations





**1. Sewer Service**

Sewer service to the proposed building would also be provided by the SBMWD. Wastewater flows generated by the Project would be conveyed via one connection at the northwest corner of the building to an existing 21-inch sewer line beneath 6th Street. All wastewater generated by the Project would be conveyed to the San Bernardino Water Reclamation Plant (SBWRP), located approximately 3.3 miles southwest of the Project Site.

**2. Drainage**

Following development of the Project Site, surface runoff would be captured and conveyed to on-site underground infiltration chambers through a network of proposed catch basins and underground piping. Three interconnected infiltration chambers are proposed, with two infiltration chambers proposed beneath the passenger vehicle parking area on the western side of the Project Site and one infiltration chamber proposed beneath the truck court on the southern side of the Project Site. The proposed infiltration chambers would serve as both a water quality best management practice (BMP) as well as an underground storage facility to detain peak flow rates and prevent runoff.

**F. Dry Utilities**

Utility service to the Project Site would be provided for phone/cable/internet, electric, and gas. Utility connection points are Site adjacent other than for Southern California Edison (SCE) electric service. To provide electric service to the Project, an underground electrical line is proposed to be installed north of the Project Site along the Sterling Avenue ROW, to a connection point approximately 0.64 mile north of the Project Site. The nearest connection point is the Guthrie 12kV circuit out of the Del Rosa substation, located approximately 3,400 feet (0.64 mile) north of the site along Sterling Avenue.

**G. Roadway Improvements**

Access to the Project Site would be accommodated by two proposed driveways connecting with Sterling Avenue, two driveways connecting with 5<sup>th</sup> Street, and one driveway connecting with 6<sup>th</sup> Street. As part of the Project, improvements in and adjacent to the public rights-of-way would be constructed along the Project Site's frontages with these roadways, as described below.

**1. Sterling Avenue Improvements**

The City of San Bernardino General Plan classifies Sterling Avenue along the Project Site's frontage as a Major Arterial, which is intended to include 100 feet of ROW and between 72 and 80 feet of paved travel lanes. Under existing conditions, Sterling Avenue along the Project Site's frontage consists of a four-lane improved roadway with no curb, gutter, or sidewalks. As part of the Project, approximately 9.0 feet of ROW would be dedicated along the Project Site's frontage with Sterling Avenue, and Sterling Avenue would be improved to four-lane roadway standards that would include 61 feet of travel lanes (inclusive of an 8-foot-wide bike lane on the eastern side); a 12-foot-wide median; a 10-foot-wide landscaped parkway along the eastern side of the road that would include a 6.5-foot-wide curb-adjacent sidewalk; between one and four feet of pavement along the west side of the roadway; and curb and gutter along the eastern edge of the roadway. Ultimate improvements to the western side of Sterling Avenue are anticipated to be constructed in conjunction with future development of the property located immediately west of the Project Site, which is located in the City



of Highland. Improvements in the public ROW that would occur in the City of Highland would require the approval of an encroachment permit from the City of Highland.

## **2. *5th Street Improvements***

The City of San Bernardino General Plan classifies 5<sup>th</sup> Street along the Project Site's frontage as a Major Arterial, which is intended to include 100 feet of ROW and within which, between 72 and 80 feet of paved travel lanes. Under existing conditions, 5<sup>th</sup> Street along the Project Site's frontage consists of a two-lane improved roadway with no sidewalks, curb, or gutter. As part of the Project, approximately 10 feet of ROW would be dedicated along the Project Site's frontage with 5<sup>th</sup> Street, and 5<sup>th</sup> Street would be improved to a four-lane roadway standard that would include 66 feet of travel lanes (inclusive of 8-foot-wide bike lanes along each side of the roadway); a 14-foot-wide striped median; a 10-foot-wide landscaped parkway along the northern side of the roadway that includes a 6.5-foot-wide curb-adjacent sidewalk; and curb and gutter along the northern and southern edges of the roadway. Ultimate improvements to the southern side of 5<sup>th</sup> Street are anticipated to be constructed in conjunction with future development of the property located immediately south of the Project Site on the opposite (south) side of 5<sup>th</sup> Street.

## **3. *6th Street Improvements***

The City of San Bernardino General Plan classifies 6<sup>th</sup> Street as a Collector Roadway, which is intended to include 60 feet of ROW and within which, 40 feet of travel lanes. Under existing conditions, 6<sup>th</sup> Street along the Project Site's frontage mostly consists of a two-lane improved roadway with no sidewalks, curb, or gutter, while a portion of the northern side of 6<sup>th</sup> Avenue has been improved adjacent to an existing warehouse building to include a right-turn lane and a landscaped parkway that includes 6.5-foot-wide curb-adjacent sidewalks. As part of the Project, approximately 7.5 feet of ROW would be dedicated along the Project Site's frontage with 6<sup>th</sup> Street, and 6<sup>th</sup> Street would be improved to include 45 feet of travel lanes (including two eastbound travel lanes and one westbound travel lane); a 12-foot-wide landscaped parkway that includes 6.5-foot-wide curb-adjacent sidewalks; and curb and gutter along the southern side of 6<sup>th</sup> Street. Ultimate improvements to the northern side of 6<sup>th</sup> Street are anticipated to be constructed in conjunction with future development of the property located on the opposite (north) side of 6<sup>th</sup> Street, north of the Project Site and west of the existing warehouse building.

## **3.6 SCOPE OF ENVIRONMENTAL ANALYSIS**

### **3.6.1 CONSTRUCTION CHARACTERISTICS**

#### **A. Proposed Physical Disturbances**

Implementation of the Project would result in proposed physical disturbances to the entire 25.12 gross-acre Project Site. Off-site Project-related impacts would include proposed improvements to Sterling Avenue, 5<sup>th</sup> Street, and 6<sup>th</sup> Street along the Project Site's frontages with these roadways (as described above in Subsection 3.5.1.1); the installation of water, irrigation, and fire water line connections within Sterling Avenue and 6<sup>th</sup> Street; and the construction of a sewer lateral within 6<sup>th</sup> Street. In addition, an underground electrical line would be installed north of the site along the east side of Sterling Avenue to a connection point approximately 3,400 feet (0.64 mile) north of the Project Site.



**B. Construction Activities Schedule and Equipment Fleet**

For the majority of Project-related construction activities, equipment is expected to operate 8 hours per day, 5 days per week during the permitted daytime hours of 7:00 a.m. to 8:00 p.m. per San Bernardino Municipal Code Section 8.54.70. Although the permitted hours of construction are longer than 8 hours per day, it is reasonably assumed that construction contractor schedules are 8 hours per day. However, some construction activities will need to occur at night (which are limited to concrete pouring activities that require air temperatures to be lower than typically occur during the daytime hours). The Project Applicant will be required to obtain authorization for nighttime construction activities per San Bernardino Municipal Code Section 8.54.60(I). The estimated construction schedule is shown in Table 3-1, *Estimated Construction Schedule*, while the construction equipment fleet that the Project Applicant anticipates its contractors will use are shown in Table 3-2, *Estimated Construction Equipment Fleet*.

It is anticipated that Project construction will take approximately 21 months and will begin in December of 2024. The construction schedule assumed in this EIR represents a conservative analysis scenario from an environmental effect perspective because, should construction occur later than the dates assumed in the analysis, construction equipment emissions would be lower than presented herein because emission regulations are becoming more stringent over time and the retirement of older (higher-polluting) equipment and replacement with newer (less-polluting) pieces of equipment is continually occurring in response to State regulations or service needs. Construction would occur in five phases: site preparation, grading, building construction, paving, and architectural coating. During site preparation and grading, earthwork movement is expected to be balanced at 81,700 cubic yards (CY) of cut and 81,700 CY of fill, which will eliminate the need for importing or exporting soil. The EIR conservatively assumes that the building construction, paving, and architectural coating phases may overlap. This assumption is made to ensure that potential environmental impacts are thoroughly analyzed and considered, providing a more cautious assessment of the Project's effects.

**3.6.2 OPERATIONAL CHARACTERISTICS**

At the time this EIR was prepared, the tenant/user(s) of the proposed high cube warehouse building are unknown. For the purposes of this EIR, the Project is assumed to be operational 24 hours per day, seven days per week, with exterior loading and parking areas illuminated at night. On-site uses would not include cold storage.

**A. Future Employment**

Because the tenant/user(s) of the Project's building is not yet known, the number of jobs that the proposed Project would generate cannot be precisely determined; therefore, for purposes of analysis, employment estimates were calculated using the Southern California Association of Governments (SCAG) Square Feet/Employee Factor. Per the SCAG *Employment Density Study Summary Report*, lands designated for warehouse uses, as is proposed for the Project Site, generate approximately one employee per 1,195 s.f. of building area. Based on this factor, the 557,000 s.f. of building space proposed as part of the Project would generate approximately 466 new, recurring jobs ( $557,000 \text{ s.f.} \div 1,195 \text{ s.f./employee} = 466.1 \text{ employees}$ ). (SCAG, 2001, Table II-B)



**Table 3-1 Estimated Construction Schedule**

Construction Activity	Start Date	End Date	Days
Site Preparation	12/1/2024	12/27/2024	20
Grading	12/30/2024	2/28/2025	45
Building Construction	3/3/2025	11/6/2026	440
Paving	9/21/2026	11/6/2026	35
Architectural Coating	9/21/2026	11/6/2026	35

(UC, 2023a, Table 3-3)

**Table 3-2 Estimated Construction Equipment Fleet**

Construction Activity	Equipment	Amount	Hours Per Day
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Graders	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	4	8
	Crawler Tractors	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

(UC, 2023a, Table 3-4)

## **B. Vehicle Trips**

As more fully discussed in EIR Subsection 4.8, *Transportation*, for purposes of evaluating the Project's potential transportation-related effects, it is assumed that the 557,000 s.f. warehouse building would be occupied entirely by high-cube transload and short-term warehouse uses (Institute of Transportation Engineers [ITE] land use code 154). Based on the Project Applicant's anticipated use for the building, the Project is calculated to result in 782 trip ends per day (in terms of actual vehicles), including 45 trips during the morning peak hour and 57 trips during the evening peak hour. Additionally, passenger car equivalent (PCE) factors were applied to the trip generation rates for heavy trucks (large 2-axels, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented in a single, standardized unit, such as a passenger car, to be used for the purposes of capacity and level of service analyses. The proposed Project is calculated to



generate a net total of 994 PCE trip-ends per day with 64 PCE morning peak hour trips and 64 PCE evening peak hour trips. (Urban Crossroads, 2023f, Table 4-2)

### **3.7 SUMMARY OF REQUESTED ACTIONS**

The City of San Bernardino has primary approval responsibility for the proposed Project. As such, the City of San Bernardino serves as the Lead Agency for this EIR pursuant to CEQA Guidelines Sections 15050 and 15051. The role of the Lead Agency was previously detailed in EIR Section 1.0, *Introduction*. As part of the approval process for the proposed Project, the City's Development/Environmental Review Committee (D/ERC) will hold a public hearing to consider the Project's Development Permit Type-D (DP-D 23-13). The D/ERC will approve, approve with changes, or deny approval of DP-D 23-13, and will determine whether to certify this EIR. The decision of the D/ERC is final, unless an appeal is filed within 15 days following D/ERC's approval of the Project, in which case a publicly-noticed public hearing would be held by the City's Planning Commission. At the appeal hearing, the Planning Commission would determine whether to uphold, uphold with modifications, or reject the D/ERC's approval of the Project and to determine whether to reject or uphold the D/ERC's certification of this EIR. Decisions of the Planning Commission are appealable to the City Council.

### **3.8 RELATED ENVIRONMENTAL REVIEW AND CONSULTATION**

Should the City of San Bernardino approve the Project and certify the Final EIR, additional discretionary and/or ministerial actions would be necessary to implement the proposed Project. Table 3-3, *Matrix of Project Approvals/Permits*, list the agencies that are expected to use this EIR and provides a summary of the subsequent actions associated with the Project. This EIR covers all federal, state, and local government and quasi-governmental approvals which may be needed to construct and implement the Project, whether or not they are explicitly listed in Table 3-3 or elsewhere in this EIR (CEQA Guidelines § 15124(d)).



**Table 3-3 Matrix of Project Approvals/Permits**

Public Agency	Approvals and Decisions
<b>City of San Bernardino Discretionary Approvals (Proposed Project)</b>	
City of San Bernardino Development/ Environmental Review Committee (D/ERC)	<ul style="list-style-type: none"><li>• Approve, conditionally approve, or deny approval of DP-D 23-13.</li></ul>
<b>Subsequent City of San Bernardino Approvals</b>	
City of San Bernardino Departments and Divisions	<ul style="list-style-type: none"><li>• Approve Conditional or Temporary Use Permits, if required.</li><li>• Issue Grading Permits.</li><li>• Issue Building Permits.</li><li>• Approve Road Improvement Plans.</li><li>• Issue Encroachment Permits.</li><li>• Accept public right-of-way dedications.</li><li>• Authorize nighttime concrete pouring activities during building construction as required pursuant to City of San Bernardino Municipal Code Section 8.54.060(I).</li></ul>
<b>Other Agencies – Approvals and Permits</b>	
City of Highland	<ul style="list-style-type: none"><li>• Encroachment Permits, if required</li><li>• Street Improvement Permits, if required</li></ul>
San Bernardino County Fire Department	<ul style="list-style-type: none"><li>• Approval of fire hydrant locations and fire protection measures.</li></ul>
Santa Ana Regional Water Quality Control Board	<ul style="list-style-type: none"><li>• Issuance of a Construction Activity General Construction Permit.</li><li>• Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit.</li><li>• Approval of WQMP</li></ul>
San Bernardino Municipal Water Department (SBMWD)	<ul style="list-style-type: none"><li>• Approval of the Project’s proposed water and sewer connections.</li></ul>
San Bernardino County Flood Control District (SBCFCD)	<ul style="list-style-type: none"><li>• Approval of drainage improvements.</li></ul>
South Coast Air Quality Management District (SCAQMD)	<ul style="list-style-type: none"><li>• Permits and approvals associated with stationary equipment (if permits or approvals are required).</li></ul>
Inland Valley Development Agency (IVDA)	<ul style="list-style-type: none"><li>• Agreement by IVDA to allow the proposed building to be constructed to its proposed height where there is building height restriction on title based on the United States use of the former Norton Air Force Base. (The Project Applicant previously obtained a ministerial Determination of No Hazard to Air Navigation from the Federal Aviation Administration (FAA) for the Project based on the proposed building height.)</li></ul>
<b>Public Utility</b>	
<b>Approvals and Decisions</b>	
Southern California Edison (SCE)	<ul style="list-style-type: none"><li>• Approval of electrical service line and equipment installation and connections.</li></ul>



## 4.0 ENVIRONMENTAL ANALYSIS

### 4.0.1 SUMMARY OF EIR SCOPE

In accordance with CEQA Guidelines Sections 15126-15126.4, this EIR Section includes analyses of potential direct, indirect, and cumulatively-considerable impacts that could result from the planning, construction, and/or operation of the proposed Project.

An Initial Study was prepared to determine the scope of environmental analysis for this EIR (refer to *Technical Appendix A*). The City of San Bernardino made the Initial Study available on its website for review and mailed a Notice of Preparation (NOP) to public agencies and interested individuals to solicit input on the scope of study for this EIR. Taking all known information and public comments into consideration, ten primary environmental subject areas are evaluated in detail in this EIR Section 4.0, as listed below. Each Subsection evaluates several specific topics related to the primary environmental subject, and excludes from detailed analysis those thresholds that were determined as part of the Initial Study and NOP process to be less than significant. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the specific subject matters addressed therein.

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Based on the conclusions in the Initial Study and after consideration of all comments received by the City of San Bernardino on the scope of this EIR and documented in the City's records, the City determined that the Project clearly has no potential to result in significant impacts under nine primary environmental subject areas: Aesthetics; Agriculture and Forestry Resources; Energy; Hazards and Hazardous Materials; Mineral Resources; Population and Housing; Public Services; Recreation; and Wildfire. These nine subjects are addressed in Section 5.0, *Other CEQA Considerations*.

### 4.0.2 SCOPE OF CUMULATIVE EFFECTS ANALYSIS

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects creating related impacts" (CEQA Guidelines Section 15130(a)(1)). As defined in CEQA Guidelines Section 15355:

*'Cumulative Impacts' refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*



- (a) *The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) *The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

CEQA Guidelines Section 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include: “1) 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 [‘the list of projects approach’], or 2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact [‘the summary of projections approach’].”

The summary of projections approach is used in this EIR, except for the evaluation of cumulative transportation and vehicular-related air quality and noise impacts, for which a combination of the summary of projections and the list of projects approaches are used. The analysis of cumulative air quality and traffic-related noise impacts combines the summary of projections approach with the manual addition of past, present, and reasonably foreseeable projects (“combined approach”). The combined approach is appropriate for the analysis of cumulative air quality and traffic-related noise impacts because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effects for all subject areas, except for vehicular-related effects, which require a greater level of detailed study. The cumulative impact analyses of vehicular-related air quality and noise impacts, which rely on data from the Project’s traffic impact analysis, inherently utilize the combined approach. With the combined approach, the cumulative impact analyses for the air quality and traffic-related noise issue areas overstate the Project’s potential cumulatively-considerable impacts relative to analyses that rely solely on the list of projects approach or solely on the summary of projections approach; therefore, the combined approach provides a conservative, “worst-case” analysis for the Project’s contribution to cumulative air quality and traffic-related noise impacts.

The list of projects used to supplement the summary of projections approach for the vehicular-related air quality and noise impact analyses includes known approved and pending development projects at the time the NOP was issued in proximity to the Project Site that would contribute traffic to the same transportation facilities as the Project. This methodology recognizes development projects that have the potential to contribute measurable traffic to the same intersections, roadway segments, and/or State highway system facilities as the proposed Project and have the potential to be fully operational in the foreseeable future. Accordingly, the cumulative impact analysis of vehicular-related air quality and noise impacts includes the 19 other known past, present, and reasonably foreseeable projects described in Table 4-1, *List of Cumulative Projects*, and depicted on Figure 4.0-1, *Cumulative Development Projects Location Map*, in addition to the summary of projections.

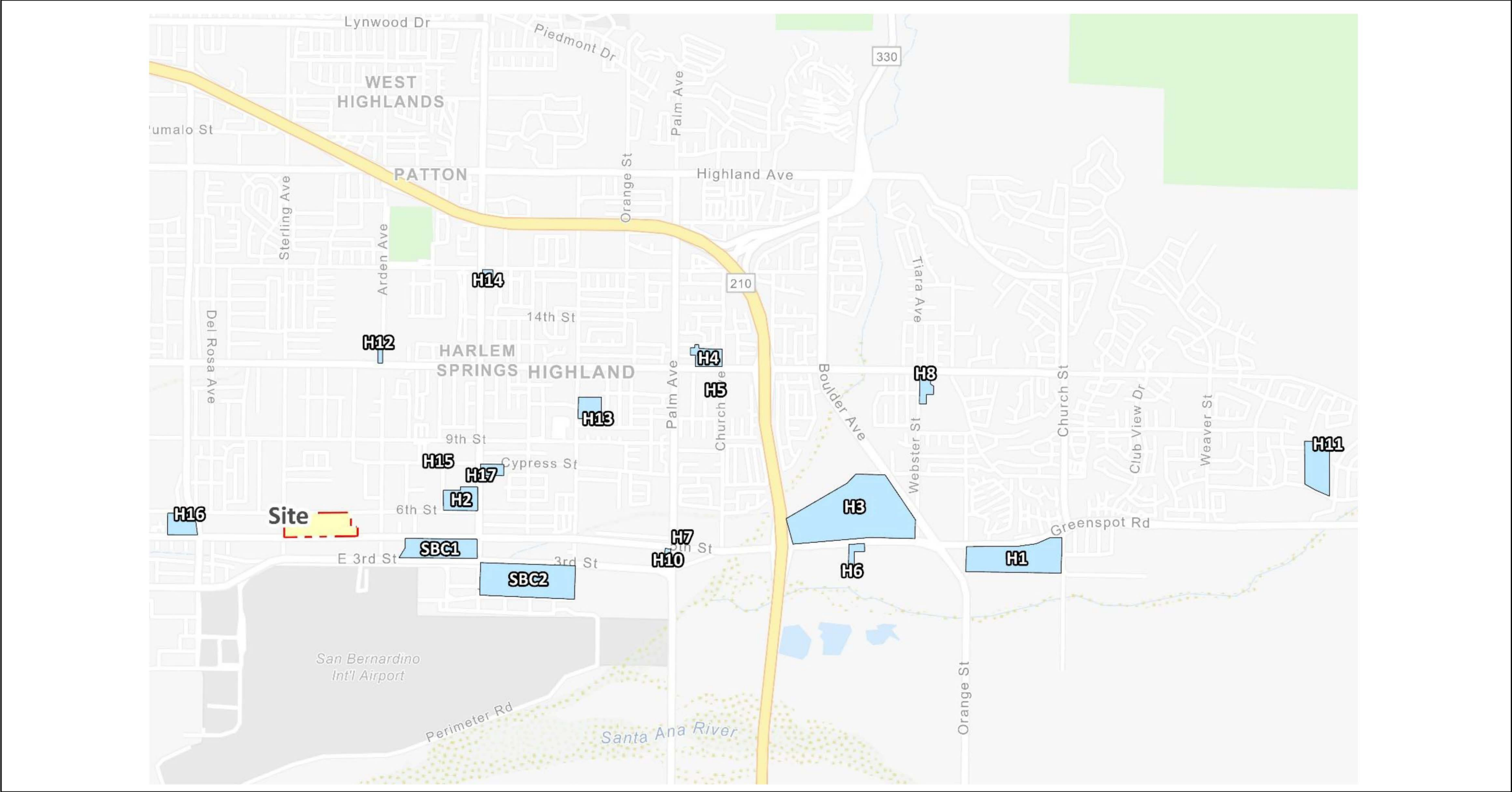


Table 4-1 List of Cumulative Projects

No.	Project Name	Land Use	Quantity <sup>1</sup>
<b>City of San Bernardino</b>			
SBC1	Patriot Partners Warehouse (3rd Street & Central Avenue)	High-Cube Warehouse	188.000 TSF
SBC2	The Landing at San Manuel	High-Cube Warehouse	1153.644 TSF
<b>City of Highland</b>			
H1	Blossom Trails/East Highlands Ranch	Multifamily Housing	137 DU
H2	Patriot Partners (6th & Victoria)	High-Cube Warehouse	306.000 TSF
H3	Greenspot Village & Marketplace Specific Plan	Multifamily Housing	546 DU
		Commercial Retail	85.000 TSF
H4	Woodcrest Real Estate Development (Tractor Supply Co.)	General Light Industrial	22.000 TSF
		Multifamily Housing	21 DU
H5	St. Adelaide Expansion - New Ministry Offices	General Office	9.000 TSF
H6	Greenspot Connection	Self-Storage	30.000 TSF
H7	8020 Palm Av.	Gas Station with Convenience Market	16 VFP
H8	Immanuel Baptist Church	Church Expansion	90.000 TSF
H9	Mediterra Specific Plan	Single Family Detached Residential	306 DU
H10	Express Car Wash	Automated Car Wash	1.800 TSF
H11	Kiel 54 - Beazer Homes	Single Family Detached Residential	54 DU
H12	26038 Base Line	Assisted Living	60 DU
H13	Highland Housing Authority/Wakeland	Multifamily Housing	90 DU
H14	Highland Heights	Commercial Retail	22.000 TSF
H15	Patriot Partners Warehouse (Cypress & Grape)	Warehousing	90.000 TSF
H16	Patriot Partners Warehouse (6th & Del Rosa)	Warehousing	47.000 TSF
H17	Patriot Partners Warehouse (Victoria & Cypress)	Warehousing	187.000 TSF

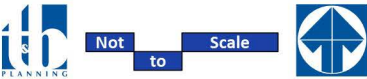
<sup>1</sup> TSF = Thousand Square Feet; DU = Dwelling Unit; VFP = Vehicle Fueling Positions

For the cumulative impact analyses that rely on the summary projections approach (i.e., all issue areas with the exception of vehicular-related air quality and noise impacts, as described above), the cumulative study area for evaluation is identified and defined in each Subsection of Chapter 4.0. The cumulative study area varies depending on the subject area. Please refer to the cumulative impact analysis provided in each Subsection in Chapter 4.0 for an issue-specific discussion of the cumulative study area.



Source(s): Urban Crossroads (10-11-2023)

Figure 4.0-1





For the issue of air quality, the cumulative study area comprises the South Coast Air Basin (SCAB), while the cumulative impact analysis relies on guidance from the South Coast Air Quality Management District (SCAQMD). The SCAQMD published a report giving direction on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (SCAQMD, 2003). In this report the AQMD states on page D-3:

*“...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is  $HI > 1.0$  while the cumulative (facility-wide) is  $HI > 3.0$ . It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*

*Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”*

The cumulative analysis provided in EIR Subsection 4.1 assumes that individual projects that do not generate emissions that exceed the SCAQMD’s recommended daily thresholds for project-specific impacts also would not cause a cumulatively-considerable increase in emissions for those pollutants for which the SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related emissions that exceed SCAQMD thresholds for Project-specific impacts would be considered cumulatively considerable.

#### 4.0.3 ANALYSIS SCOPE

As discussed in Section 3.0, *Project Description*, the proposed Project entails the City of San Bernardino’s approval of a Development Permit Type-D (DP-D 23-13), to entitle a 25.12-gross-acre property located at the northeast corner of 5<sup>th</sup> Street at Sterling Avenue in the City of San Bernardino for development with a 557,000 square foot (s.f.) high cube warehouse building that would include 552,000 s.f. of ground floor space and 5,000 s.f. of mezzanine space with a total of 80 truck docking doors along the southern side of the building. Other proposed physical features include but are not limited to access driveways, surface parking areas, walls, fencing, lighting, utilities, and landscaping. Access to the Project Site would be accommodated by two driveways connecting with 5<sup>th</sup> Street, two driveways connecting with Sterling Avenue, and one driveway connecting with 6<sup>th</sup> Street. Off-site improvements include roadway frontage improvements along 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue, and the installation of an underground electrical service line along the east side of Sterling Avenue for approximately 0.64 miles north of the Project Site to a connection point. This EIR



evaluates the environmental effects associated with construction and operation of the proposed Project and its associated on- and off-site improvements.

#### **4.0.4 ANALYSIS FORMAT**

Subsections 4.1 through 4.10 of this EIR evaluate the 10 environmental subjects warranting detailed analysis as determined by the City of San Bernardino in consideration of preliminary research findings, public comments, and technical study. The format of discussion is standardized as much as possible in each section for ease of review. The environmental setting is discussed first, followed by a discussion of the potential environmental impacts that would result from implementation of the Project (which is based on specified thresholds of significance used as criteria to determine whether potential environmental effects are significant).

The thresholds of significance used in this EIR are based on the thresholds of significance identified in Appendix G to the CEQA Guidelines. The thresholds are intended to assist the reader of this EIR in understanding how and why this EIR reaches a conclusion that an impact would or would not occur, and whether the impact would be significant or less than significant.

Serving as the CEQA Lead Agency for this EIR, the City of San Bernardino is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the independent judgment of the City of San Bernardino, taking into consideration the City of San Bernardino General Plan; the City of San Bernardino Municipal Code and adopted City policies; the judgment of the technical experts that prepared this EIR's technical appendices; performance standards adopted, implemented, and monitored by regulatory agencies; and significance standards recommended by regulatory agencies.

As required by CEQA Guidelines Section 15126.2(a), Project-related effects on the environment are characterized in this EIR as direct, indirect, cumulatively-considerable, short-term, long-term, on-site, and/or off-site impacts. A summarized "impact statement" is provided in each subsection following the analysis. Each subsection also includes a discussion or listing of the applicable regulatory criteria (laws, policies, regulations) that the Project and its implementing actions are required to comply with (if any). If impacts are identified as significant after mandatory compliance with regulatory criteria, feasible mitigation measures are presented that would either avoid the impact or reduce the magnitude of the impact. For any impact identified as significant and unavoidable, the City of San Bernardino would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines Section 15093 in order to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, and other benefits of the Project, supported by substantial evidence in the Project's administrative record, that outweigh the unavoidable impacts.



## 4.1 AIR QUALITY

This Subsection is based primarily on two technical studies that were prepared by Urban Crossroads, Inc. to evaluate the potential for Project-related construction and operational activities to result in adverse effects on local and regional air quality. The first report titled “5<sup>th</sup> & Sterling Air Quality Impact Analysis” (herein, “AQIA”) assesses the Project’s potential to result in regional and localized air quality impact analysis, is dated February 29, 2024, and is included as *Technical Appendix C1* to this EIR (UC, 2024a). The second report, titled “5<sup>th</sup> & Sterling Construction and Operational Health Risk Assessment” (herein, “HRA”) evaluates potential cancer and non-cancer related health risks, is dated February 29, 2024, and is included as *Technical Appendix C2* to this EIR (UC, 2024b). Refer to Section 7.0, *References*, for a complete list of reference sources used in this Subsection.

Based on analyses conducted as part of the Project’s Initial Study, and the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), the City determined that the Project would clearly result in a less-than-significant impacts under one of the thresholds identified in Section III (Air Quality) of Appendix G to the CEQA Guidelines:

- d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Accordingly, no additional analysis of the above-listed threshold is required. Refer to the Project’s Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.3 for a discussion and analysis of the above-listed threshold not analyzed in this subsection.

This Subsection focuses on the Project’s potential to adversely affect the remaining thresholds of significance under Section III (Air Quality) of Appendix G to the CEQA Guidelines:

- a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?*
- b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*
- c) Would the Project expose sensitive receptors to substantial pollutant concentrations?*

### 4.1.1 EXISTING CONDITIONS

#### A. South Coast Air Basin

The Project Site is located in the South Coast Air Basin (SCAB, or “Basin”), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies (Los Angeles, Orange, Riverside, and San Bernardino counties) into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. SCAQMD develops comprehensive plans and regulatory programs for the



region to attain federal standards by dates specified in federal law. The agency is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures. The SCAB encompasses approximately 6,745 square miles and includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and the San Jacinto Mountains to the north and east; and the San Diego County line to the south. (UC, 2024a, p. 9)

### ***B. Regional Climate***

The regional climate – temperature, wind, humidity, precipitation, and the amount of sunshine – has a substantial influence on air quality. The SCAB’s distinctive climate is determined by its terrain and geographical location, which comprises a coastal plain connected to broad valleys and low hills bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The SCAB is semi-arid, with average annual temperatures varying from the low-to-middle 60s, measured in degrees Fahrenheit (F); however, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of the SCAB’s climate. Humidity restricts visibility in the SCAB and the relative high humidity heightens the conversion of sulfur dioxide to sulfates. The marine layer provides an environment for that conversion process, especially during the spring and summer months. Inland areas of the SCAB, including where the Project Site is located, show more variability in annual minimum/maximum temperatures and lower average humidity than coastal areas within the SCAB due to decreased marine influence. (UC, 2024a, p. 9)

More than 90 percent of the SCAB’s rainfall occurs between November and April. The annual average rainfall within the SCAB varies between approximately nine (9) inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB. Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB; the remaining one-quarter is absorbed by clouds. The abundant amount of sunshine (and its associated ultraviolet radiation) is a key factor to the photochemical reactions of air pollutants in the SCAB. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine. (UC, 2024a, pp. 9-10)

Dominant airflow direction and speed are the driving mechanisms for transport and dispersion of air pollution. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with storms moving through the region from the northwest. This period also brings five to 10 periods of strong, dry offshore winds, locally termed “Santa Anas” each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. During the nighttime, heavy, cool air descends mountain slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the “Catalina Eddy,” a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest.



On most spring and summer days, some indication of an eddy is apparent in coastal sections. (UC, 2024a, p. 10)

In the SCAB, there are two distinct temperature inversion structures that control the vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level. A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides and carbon monoxide, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline. (UC, 2024a, p. 10)

### **C. Wind Patterns**

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season. (UC, 2024a, pp. 10-11)

### **D. Air Quality Pollutants and Associated Human Health Effects**

The federal government and State of California have established maximum permissible concentrations for common air pollutants that may pose a risk to human health or would otherwise degrade air quality and adversely affect the environment. These regulated air pollutants are referred to as “criteria pollutants.” An overview of the common criteria air pollutants in the SCAB, their sources, and associated effects to human health are summarized on the following pages (also refer to Section 2.4 of *Technical Appendix C1*).

- **Carbon Monoxide (CO)** is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest in the winter during the morning, when there is little to no wind and surface-based inversions trap the pollutant at ground levels. CO is emitted directly from internal combustion engines; therefore, motor vehicles operating at slow speeds are the primary source of CO and the highest ambient CO concentrations in the SCAB are generally found near congested transportation corridors and intersections. Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O<sub>2</sub>) supply to the heart. Inhaled CO does not directly affect the lungs but affects tissues by interfering with oxygen transport and competing



with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Therefore, health conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. The most common symptoms associated with CO exposure include headache, nausea, vomiting, dizziness, fatigue, and muscle weakness. Individuals most at risk to the effects of CO include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic oxygen deficiency as seen at high altitudes. (UC, 2024a, Table 2-1)

- **Sulfur Dioxide (SO<sub>2</sub>)** is a colorless gas or liquid. SO<sub>2</sub> enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO<sub>2</sub> oxidizes in the atmosphere, it forms sulfates (SO<sub>4</sub>). Collectively, these pollutants are referred to as sulfur oxides (SO<sub>x</sub>). SO<sub>2</sub> is a respiratory irritant to people afflicted with asthma. After a few minutes' exposure to low levels of SO<sub>2</sub>, asthma sufferers can experience breathing difficulties, including airway constriction and reduction in breathing capacity. Although healthy individuals do not exhibit similar acute breathing difficulties in response to SO<sub>2</sub> exposure at low levels, animal studies suggest that very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO<sub>2</sub> levels. In these studies, efforts to separate the effects of SO<sub>2</sub> from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor. (UC, 2024a, Table 2-1)
- **Nitrogen Oxides (NO<sub>x</sub>)** consist of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O) and are formed when nitrogen (N<sub>2</sub>) combines with oxygen (O<sub>2</sub>). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO<sub>2</sub> is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere, and reduced visibility. Of the nitrogen oxide compounds, NO<sub>2</sub> is the most abundant in the atmosphere. As ambient concentrations of NO<sub>2</sub> are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO<sub>2</sub> than those indicated by regional monitoring stations. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO<sub>2</sub> at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Short-term exposure to NO<sub>2</sub> can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO<sub>2</sub> can decrease lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema). In animals, exposure to levels of NO<sub>2</sub> considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O<sub>3</sub> exposure increases when animals are exposed to a combination of O<sub>3</sub> and NO<sub>2</sub>. (UC, 2024a, Table 2-1)



- **Ozone (O<sub>3</sub>)** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, warm temperatures, and light wind conditions are favorable to the formation of this pollutant. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O<sub>3</sub> levels are associated with increased school absences. In recent years, a correlation between elevated ambient O<sub>3</sub> levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O<sub>3</sub> levels. 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 sub-groups for ozone effects. Children who participate in multiple outdoor sports and live in communities with high ozone levels have been found to have an increased risk for asthma. O<sub>3</sub> exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O<sub>3</sub> may be more toxic than exposure to O<sub>3</sub> alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes. (UC, 2024a, Table 2-1)
- **Particulate Matter less than 10 microns (PM<sub>10</sub>) and less than 2.5 microns (PM<sub>2.5</sub>)** are air pollutants consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols that are 10 microns or smaller or 2.5 microns or smaller, respectively. These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO<sub>2</sub> release from power plants and industrial facilities and nitrates that are formed from NO<sub>x</sub> release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles is highly dependent on location, time of year, and weather conditions. The small size of PM<sub>10</sub> and PM<sub>2.5</sub> allows them to enter the lungs where they may be deposited, resulting in adverse health effects. Elevated ambient concentrations of fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) have been linked to an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and increased hospital admissions. Some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer. Daily fluctuations in PM<sub>2.5</sub> concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children, appear to be the most susceptible to the effects of high levels of PM<sub>10</sub> and PM<sub>2.5</sub>. (UC, 2024a, Table 2-1)
- **Volatile Organic Compounds (VOCs) and Reactive Organic Gasses (ROGs)** are a family of hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon



atoms) that exist in the ambient air. Both VOCs and ROGs are precursors to ozone and contribute to the formation of smog through atmospheric photochemical reactions. Individual VOCs and ROGs have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, including such common VOCs as gasoline, alcohol, and the solvents used in paints. Odors generated by VOCs can irritate the eye, nose, and throat, can cause difficulty in breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several. (UC, 2024a, Table 2-1)

- **Lead (Pb)** is a heavy metal that is highly persistent in the environment. Historically, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. Currently, emissions of lead are largely limited to stationary sources such as lead smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers. (UC, 2024a, Table 2-1)
- **Odors** means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves. Odors can come from many sources including animals, human activities, industry, nature, and vehicles. Although not a criteria pollutant, offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. (UC, 2024a, Table 2-1)

#### **E. Existing Air Quality**

Air quality is evaluated in the context of ambient air quality standards published by the federal and State governments. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are detailed in Table 4.1-1, *Ambient Air Quality Standards*. In California, a region's air quality is determined to be healthful or unhealthful by comparing pollutant levels in ambient air samples to the applicable NAAQS and CAAQS (as presented in Table 4.1-1). The air quality in a region is considered to be in attainment by the state if the measured ambient



Table 4.1-1 Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> ) <sup>8</sup>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM10) <sup>9</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—		
Fine Particulate Matter (PM2.5) <sup>9</sup>	24 Hour	—	—	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—	
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>11</sup>	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>11</sup>	—	
Lead <sup>12,13</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>14</sup>	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			
See footnotes on next page ...						

See footnotes on next page ...

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Table 4.1-1 Ambient Air Quality Standards (Cont'd)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150  $\mu\text{g}/\text{m}^3$  is equal to or less than one. For PM<sub>2.5</sub>, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15  $\mu\text{g}/\text{m}^3$  to 12.0  $\mu\text{g}/\text{m}^3$ . The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35  $\mu\text{g}/\text{m}^3$ , as was the annual secondary standard of 15  $\mu\text{g}/\text{m}^3$ . The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150  $\mu\text{g}/\text{m}^3$  also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO<sub>2</sub> 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. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
  
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5  $\mu\text{g}/\text{m}^3$  as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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(UC, 2024a, Table 2-2)



air pollutant levels for O<sub>3</sub>, CO (except 8-hour Lake Tahoe), SO<sub>2</sub> (1 and 24 hour), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, CARB has implemented a State Implementation Plan (SIP). The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (UC, 2024a, p. 18)

## 1. Regional Air Quality

The EPA has established NAAQS for six of the most common air pollutants: CO, Pb, O<sub>3</sub>, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), NO<sub>2</sub>, and SO<sub>2</sub> which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 monitoring stations and five (5) single-pollutant source Pb air monitoring sites throughout its jurisdiction. On January 25, 2024, CARB posted the proposed 2023 amendments to the state and national area designations. The attainment status for criteria pollutants within the SCAB is summarized in Table 4.1-2, *SCAB Criteria Pollutant Attainment Status*. (UC, 2024a, p. 21)

**Table 4.1-2 SCAB Criteria Pollutant Attainment Status**

Criteria Pollutant	State Designation	Federal Designation
O <sub>3</sub> – 1-hour standard	Nonattainment	--
O <sub>3</sub> – 8-hour standard	Nonattainment	Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO <sub>2</sub>	Attainment	Unclassifiable/Attainment
SO <sub>2</sub>	Attainment	Unclassifiable/Attainment
Pb <sup>1</sup>	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB

<sup>1</sup> The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

-- = No standards identified. (UC, 2024a, Table 2-3)

## 2. Local Air Quality

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents information about the air quality conditions. The Project Site is located within the Central San Bernardino Valley 2 area (SRA 34). The Central San Bernardino Valley 2 monitoring station is located approximately 1.66 miles west of the Project Site and reports air quality statistics for O<sub>3</sub>, CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The most recent three (3) years of data available for ambient air pollutant concentrations in the Project area are summarized in Table 4.1-3, *Project Area Air Quality Monitoring Summary 2020-2022*, which also identifies the number of days ambient air quality standards were exceeded for the study area and is considered to be representative of the local air quality at the



Project Site. Data for O<sub>3</sub>, CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> for 2020 through 2022 was obtained from the SCAQMD Air Quality Data Tables. Additionally, data for SO<sub>2</sub> has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO<sub>2</sub> concentrations. (UC, 2024a, p. 21)

**Table 4.1-3 Project Area Air Quality Monitoring Summary 2020-2022**

Pollutant	Standard	Year		
		2020	2021	2022
O <sub>3</sub>				
Maximum Federal 1-Hour Concentration (ppm)		0.162	0.142	0.128
Maximum Federal 8-Hour Concentration (ppm)		0.128	0.112	0.105
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	89	66	60
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	128	101	103
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.9	2.0	1.7
Maximum Federal 8-Hour Concentration	> 20 ppm	1.4	1.6	1.4
NO <sub>2</sub>				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.054	0.056	0.053
Annual Federal Standard Design Value		0.015	0.015	0.016
PM <sub>10</sub>				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 150 µg/m <sup>3</sup>	80	111	177
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )		38.7	39.3	38.0
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m <sup>3</sup>	0	0	1
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m <sup>3</sup>	81	79	65
PM <sub>2.5</sub>				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 35 µg/m <sup>3</sup>	25.70	57.90	40.10
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )	> 12 µg/m <sup>3</sup>	11.66	11.90	11.26
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	0	1	2

ppm = Parts Per Million

µg/m<sup>3</sup> = Microgram per Cubic Meter

(UC, 2024a, Table 2-4)

### 3. Toxic Air Contaminants

MATES-V calculated cancer risks based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are within the local area of the Project Site. However, MATES-V extrapolates the excess cancer risk levels throughout the SCAB by modeling the specific grids. The Project is located within a quadrant of the geographic grid of the MATES-V model which predicted a cancer risk of 492 in one million. Diesel Particulate Matter (DPM) is included in this cancer risk along with all other Toxic Air Contaminant (TAC) sources. As in previous MATES iterations, DPM is the largest contributor to overall air toxics cancer risk. However, the average levels of DPM in MATES V are 53% lower at the 10 monitoring sites compared to MATES IV. (UC, 2024a, p. 35)

The reductions in cancer and non-cancer risks and heavy truck-related air quality emissions within the SCAB also has been documented in a technical memorandum prepared by Ramboll US Consulting, Inc. (Ramboll).



This technical memorandum, which is herein incorporated by reference pursuant to CEQA Guidelines § 15150 and dated February 13, 2023, is entitled, “Technical Comments in Response to the December 2022 Report Titled *A Region In Crisis: The Rationale For A Public Health State Of Emergency In The Inland Empire*” (herein, “Ramboll Report”) (Ramboll, 2023). As demonstrated by the Ramboll Report, emissions of DPM and NO<sub>x</sub> and vehicle miles traveled (VMT) from heavy truck trips have consistently declined within the Inland Empire (IE) and are expected to continue to decline through at least 2040. The Ramboll Report also notes that “[e]xisting regulatory requirements have reduced PM and NO<sub>x</sub> emissions from trucks in the IE by 94% and 82% respectively from 2000 to 2023,” and further notes that “[a]dditional reductions of PM (7%) and NO<sub>x</sub> (27%) emissions are expected to occur from 2023 to 2040 as a result of the recently adopted Low NO<sub>x</sub> Heavy-Duty Omnibus and ACT regulations that are already transitioning the diesel vehicles to cleaner technologies including Zero Emission (ZE) trucks.” The Ramboll Report also demonstrates that the DPM emissions from trucks operating in the IE were reduced by 77% from 2016 to 2023, and shows that the DPM emissions from Transport Refrigeration Units (TRUs) operating in the IE also have been reduced by 39% since 2016. This reduction in DPM emission rates has resulted in a corresponding significant reduction in risk as well, despite increasingly conservative regulatory guidance in the preparation of HRAs, particularly OEHHA’s adoption of age sensitivity factors in their revised HRA guidance released in 2015. Moreover, the results of Ramboll’s study showed an estimated basin-wide air toxics cancer risk of 336 in a million in 2023, representing a 20% reduction as compared to 2018 when the basin average air toxics cancer risk was estimated at 424 in a million, as reported by MATES V. The Ramboll Report concludes that “substantial air quality improvements have occurred and will continue to occur based on existing regulatory requirements and the transition to ZE trucks as they become more commercially available will only further improve an already dramatically improved air quality environment.” (Ramboll, 2023, pp. 14, 24, and 26)

#### **4. Regional Air Quality Improvement**

SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in SCAB air quality. Nearly all control programs developed through the early 1990s relied on (i) the development and application of cleaner technology; (ii) add-on emission controls, and (iii) uniform CEQA review throughout the SCAB. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB. (UC, 2024a, p. 26)

As the lead agency charged with regulating air quality emission reductions for the entire SCAB, SCAQMD created AQMPs which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the SCAB. The previously-adopted 2012 AQMP noted that, “the remarkable historical improvement in air quality since the 1970’s is the direct result of Southern California’s comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs.” (UC, 2024a, p. 26)

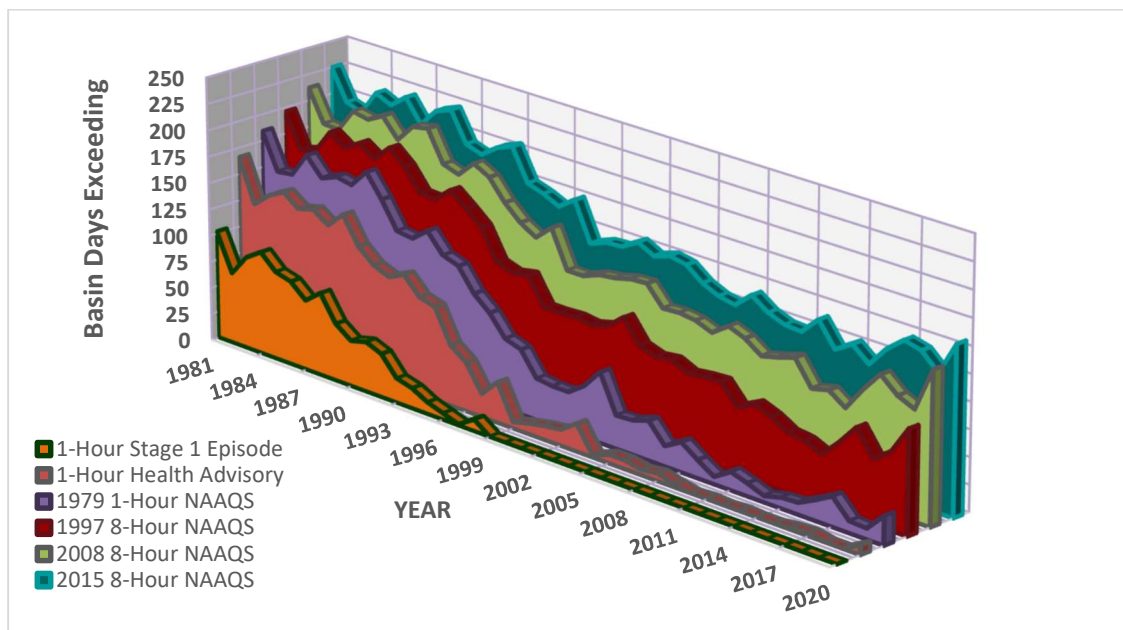
Emissions of O<sub>3</sub>, NO<sub>x</sub>, VOC, and CO have been decreasing in the SCAB since 1975 and are projected to continue to decrease through 2020. These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although total vehicle miles traveled (VMT) in the SCAB continue to increase, NO<sub>x</sub> and VOC levels are decreasing because of federal- and State- mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO<sub>x</sub> emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. O<sub>3</sub> contour maps show



that the number of days exceeding the 8-hour NAAQS decreased between 1980 and 2020. In the 2020 period, there was an overall decrease in exceedance days compared with the 1980 period. However, as shown on Figure 4.1-1, *South Coast Air Basin Ozone Trend*, O<sub>3</sub> levels have increased in the past three years due to higher temperatures and stagnant weather conditions. Notwithstanding, O<sub>3</sub> levels in the SCAB have decreased substantially over the last 30 years with the current maximum measured concentrations being approximately one-third of concentrations within the late 1970s. (UC, 2024a, pp. 26-27)

The overall trends of PM<sub>10</sub> and PM<sub>2.5</sub> levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM<sub>10</sub> have remained somewhat constant in the SCAB and direct emissions of PM<sub>2.5</sub> have decreased slightly since 1975. Area-wide sources (fugitive dust from roads, dust from construction, and other sources) contribute the greatest amount of direct particulate matter emissions. (UC, 2024a, p. 27)

**Figure 4.1-1 South Coast Air Basin Ozone Trend**



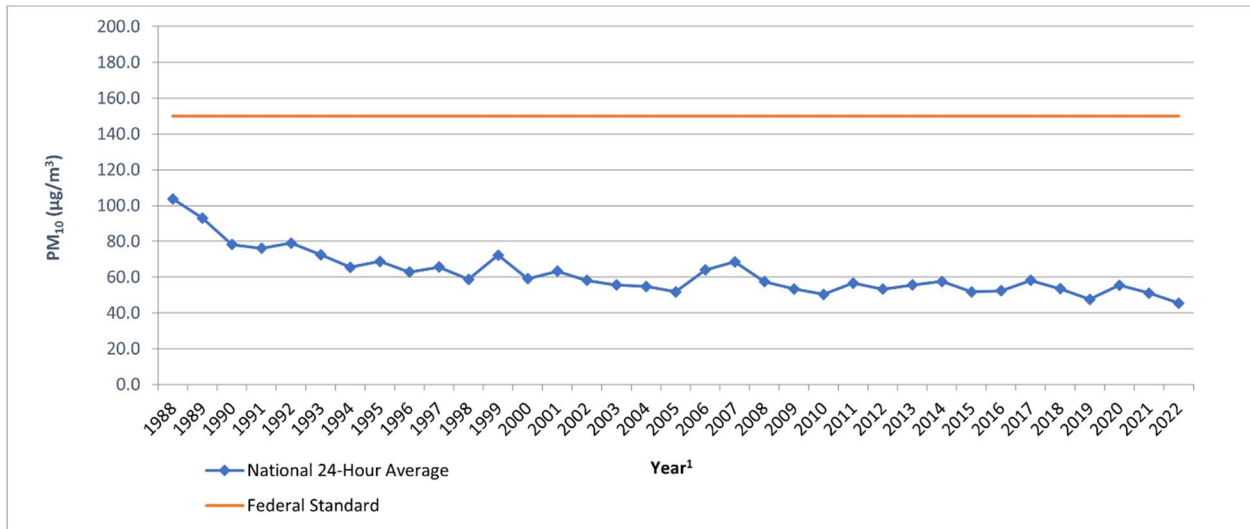
(UC, 2024a, Table 2-5)

As with other pollutants, the most recent PM<sub>10</sub> statistics show an overall improvement as illustrated in Figure 4.1-2, *SCAB Average 24-Hour Concentration PM10 Trend (Federal Standard)*, and Figure 4.1-3, *SCAB Annual Average Concentration PM10 Trend (State Standard)*. During the period for which data are available, the 24-hour national annual average concentration for PM<sub>10</sub> decreased by approximately 56 percent, from 103.7 µg/m<sup>3</sup> in 1988 to 45.5 µg/m<sup>3</sup> in 2022. Although the values are below the federal standard, it should be noted that there are days within the year where the concentrations will exceed the threshold. The 24-hour State annual average for emissions for PM<sub>10</sub>, have decreased by approximately 64%, from 93.9 µg/m<sup>3</sup> in 1989 to 37.3 µg/m<sup>3</sup> in 2022. Although data in the late 1990's show some variability, this is likely due to the advances in meteorological science rather than a change in emissions. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM<sub>10</sub> standards has also shown an overall drop. (UC, 2024a, p. 27)



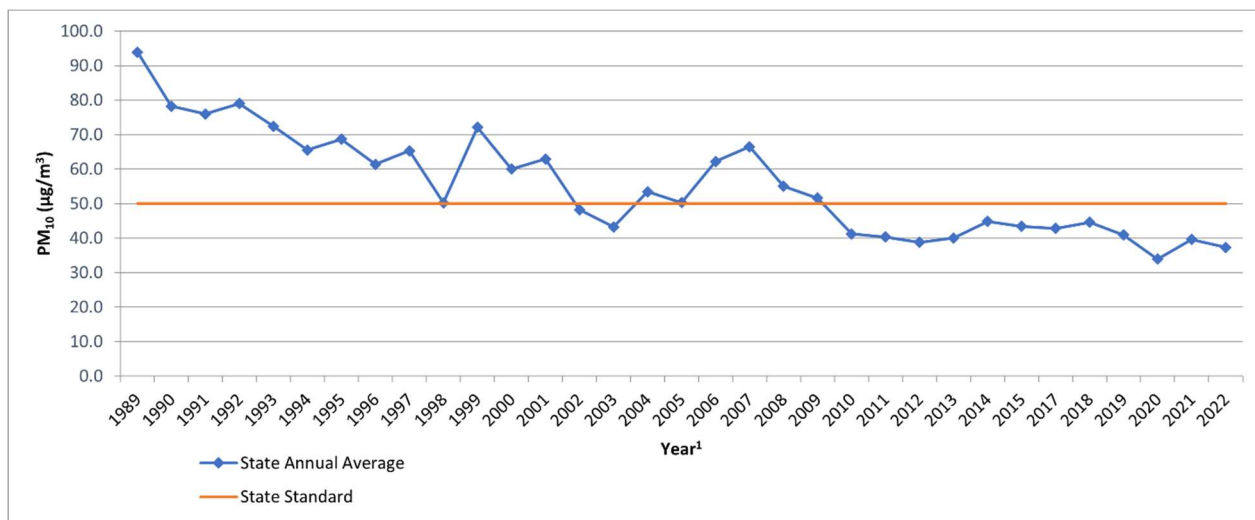
Figure 4.1-4, *SCAB 24-Hour Average Concentration PM<sub>2.5</sub> Trend (Federal Standard)*, and Figure 4.1-5, *SCAB Annual Average Concentration PM<sub>2.5</sub> Trend (State Standard)*, show the most recent 24-hour average PM<sub>2.5</sub> concentrations in the SCAB from 1999 through 2022. Overall, the national and State annual average concentrations decreased by almost 60 percent and 42 percent, respectively. It should be noted that the SCAB is currently designated as nonattainment for the State and federal PM<sub>2.5</sub> standards. (UC, 2024a, p. 28)

**Figure 4.1-2 SCAB Average 24-Hour Concentration PM<sub>10</sub> Trend (Federal Standard)**



(UC, 2024a, Table 2-6)

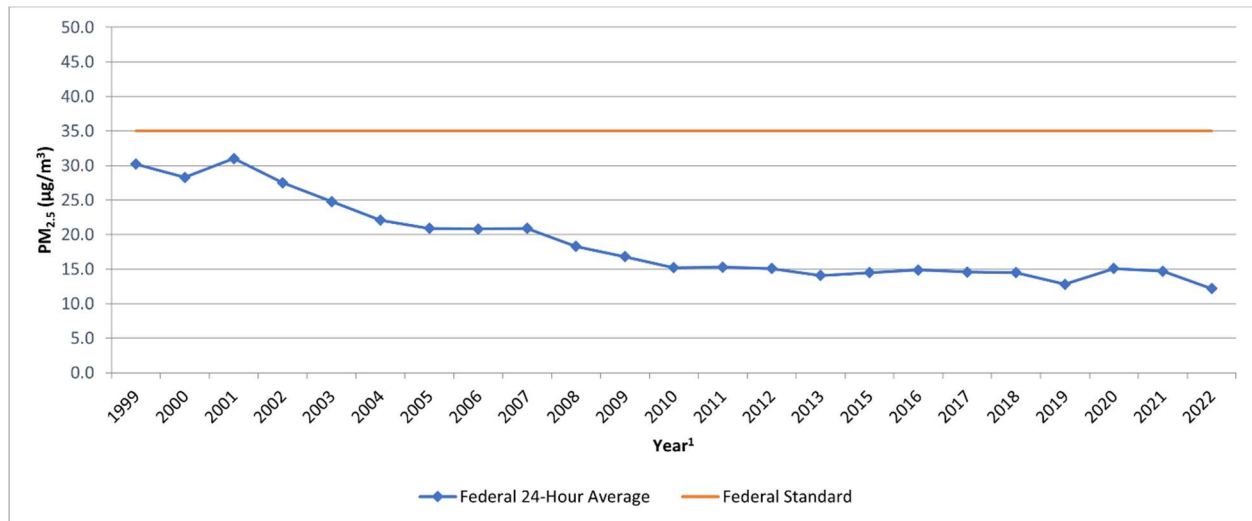
**Figure 4.1-3 SCAB Annual Average Concentration PM<sub>10</sub> Trend (State Standard)**



(UC, 2024a, Table 2-7)

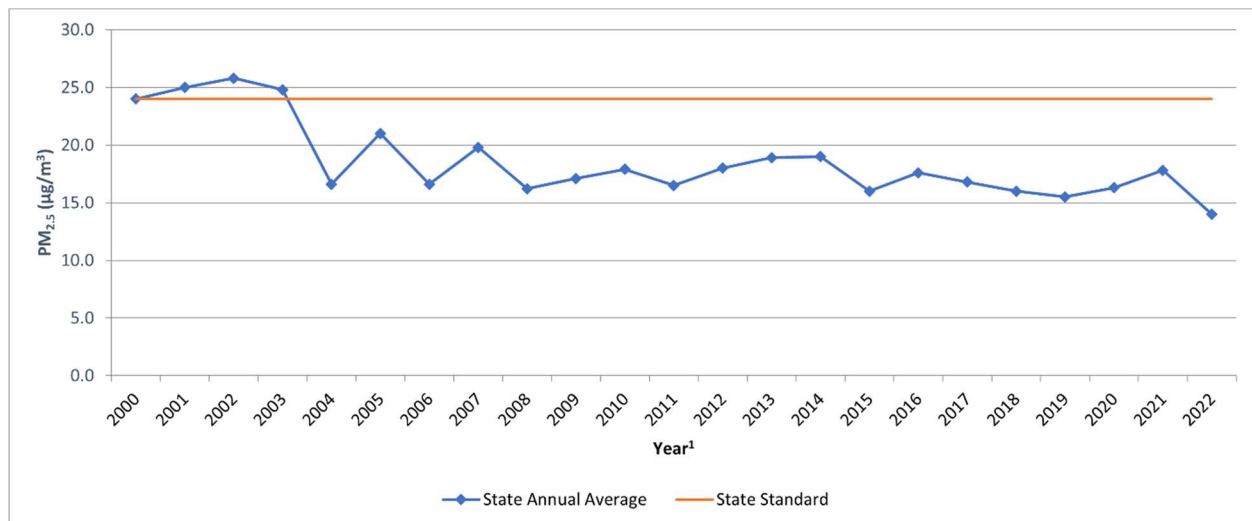


Figure 4.1-4 SCAB 24-Hour Average Concentration PM<sub>2.5</sub> Trend (Federal Standard)



(UC, 2024a, Table 2-8)

Figure 4.1-5 SCAB Annual Average Concentration PM<sub>2.5</sub> Trend (State Standard)



(UC, 2024a, Table 2-9)

While the 2012 AQMP PM<sub>10</sub> attainment demonstration and the 2015 associated supplemental SIP submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, it could not anticipate the effect of the ongoing drought on the measured PM<sub>2.5</sub>. The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of PM<sub>2.5</sub>-equivalent emission reductions continued through 2015, the severe drought conditions contributed to the PM<sub>2.5</sub> increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour PM<sub>2.5</sub> standard, SCAQMD submitted a request and the EPA approved, in January 2016, a “bump up” to the nonattainment classification from “moderate” to “serious,” with a new attainment deadline as soon as practicable, but not

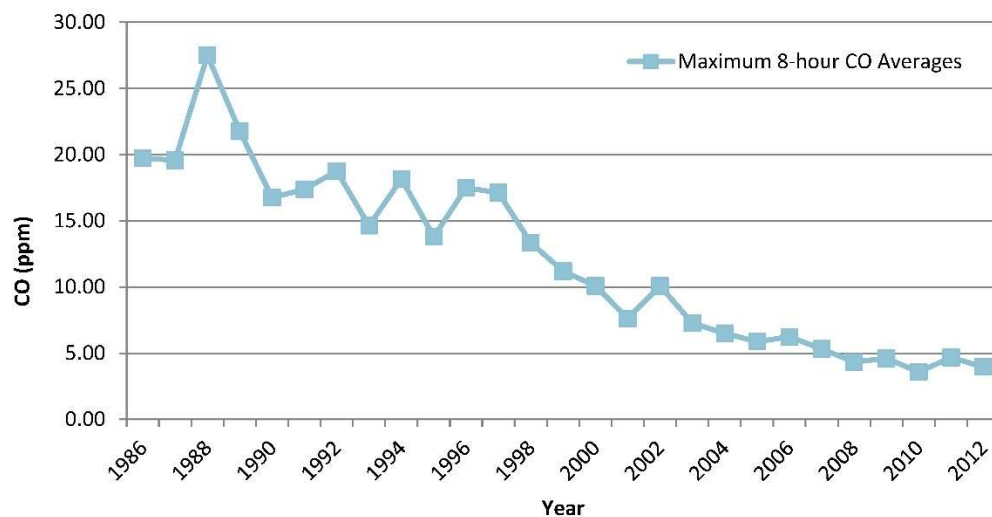


beyond December 31, 2019. As of March 14, 2019, the EPA approved portions of a SIP revision submitted by California to address CAA requirements for the 2006 24-hour PM<sub>2.5</sub> NAAQS in the Los Angeles-SCAB Serious PM<sub>2.5</sub> nonattainment area. The EPA also approved 2017 and 2019 motor vehicle emissions budgets for transportation conformity purposes and inter-pollutant trading ratios for use in transportation conformity analyses. (UC, 2024a, pp. 29-30)

In December 2022, the SCAQMD released the Final 2022 AQMP. The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS, also referred to as “Connect SoCal”) and updated emission inventory methodologies for various source categories. (UC, 2024a, p. 30)

The most recent CO concentrations in the SCAB are shown in Figure 4.1-6, *SCAB 8-Hour Average Concentration CO Trend*. CO concentrations in the SCAB have decreased markedly; it has experienced a total decrease of more about 80% in the peak 8-hour concentration from 1986 to 2012. It should be noted 2012 is the most recent year where 8-hour CO averages and related statistics are available in the SCAB. The number of exceedance days has also declined. The entire SCAB is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations. (UC, 2024a, p. 30)

**Figure 4.1-6 SCAB 8-Hour Average Concentration CO Trend**



(UC, 2024a, Table 2-10)

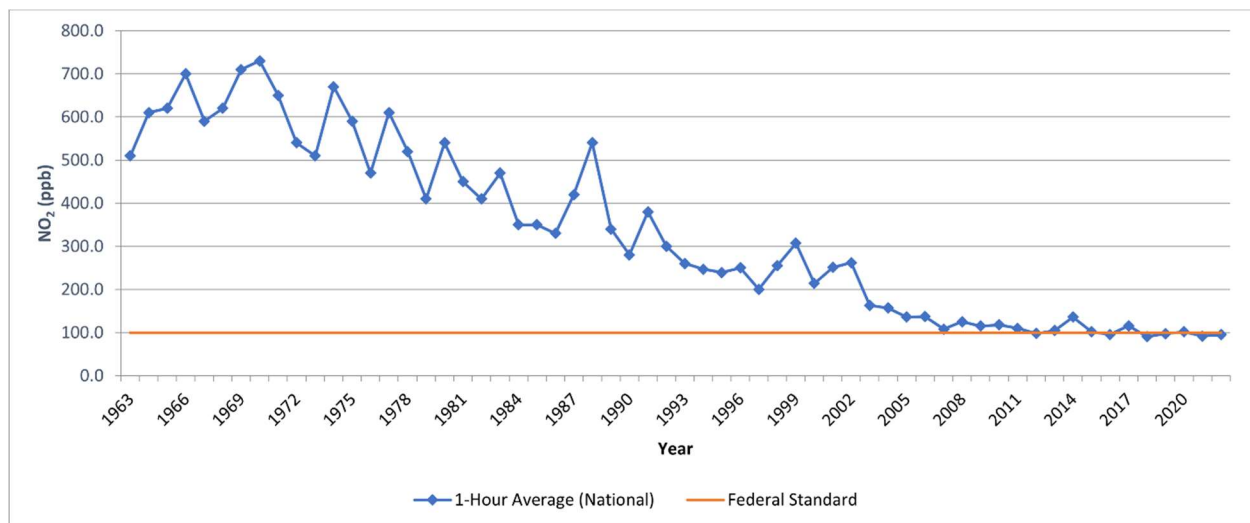
Part of the control process of the SCAQMD’s duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD’s CEQA Air Quality Handbook (1993) (1993 CEQA Handbook). The single threshold of significance used to assess Project direct and cumulative impacts has in



fact “worked” as evidenced by the track record of the air quality in the SCAB dramatically improving over the course of the past decades. As stated by the SCAQMD, the SCAQMD’s thresholds of significance are based on factual and scientific data and are therefore considered appropriate thresholds of significance for purposes of determining air quality impacts. (UC, 2024a, p. 31)

The most recent NO<sub>2</sub> data for the SCAB is shown in Figure 4.1-7, *SCAB 1-Hour Average Concentration NO<sub>2</sub> Trend (Federal Standard)*, and Figure 4.1-8, *SCAB 1-Hour Average Concentration NO<sub>2</sub> Trend (State Standard)*. Over the last 50 years, NO<sub>2</sub> values have decreased significantly; the peak 1-hour national and State averages for 2022 are approximately 81 percent lower than reported for 1963. The SCAB attained the State 1-hour NO<sub>2</sub> standard in 1994, bringing the entire State of California into attainment. A new State annual average standard of 0.030 parts per million was adopted by the California Air Resources Board (CARB) in February 2007. The new standard is just barely exceeded in the SCAB today. NO<sub>2</sub> is formed from NO<sub>x</sub> emissions, which also contribute to O<sub>3</sub>. As a result, the majority of the future emission control measures will be implemented by the State as part of the overall ozone control strategy. Many of these control measures will target mobile (vehicle tailpipe) sources, which account for more than three-quarters of California’s NO<sub>x</sub> emissions. These State-mandated control measures are expected to bring the SCAB into attainment of the State annual average standard. (UC, 2024a, p. 31)

**Figure 4.1-7 SCAB 1-Hour Average Concentration NO<sub>2</sub> Trend (Federal Standard)**

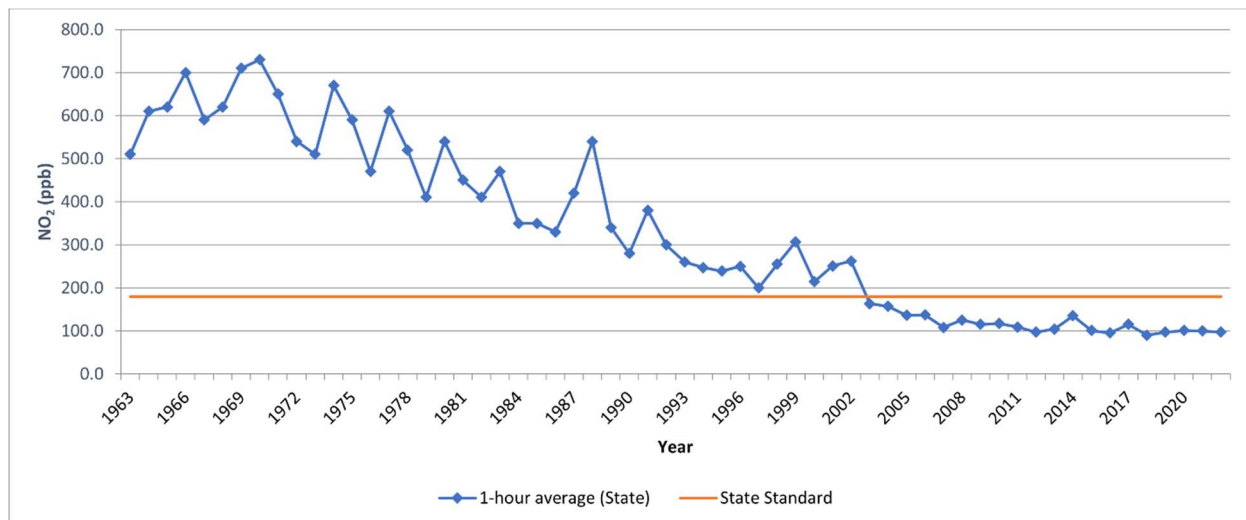


(UC, 2024a, Table 2-11)

#### ☐ **Toxic Air Contaminant Trends**

Toxic air contaminants (TACs) are a classification of air pollutants that have been attributed to carcinogenic and non-carcinogenic health risks. In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of TAC emissions resulting from mobile and area sources, such as cars, trucks, stationary sources, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article, which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of

Figure 4.1-8 SCAB 1-Hour Average Concentration NO<sub>2</sub> Trend (State Standard)



(UC, 2024a, Table 2-12)

the known cancer risk associated with airborne exposure in California have declined significantly (between 1990 and 2012). The seven TACs studied include those that are derived from mobile sources: DPM, benzene (C<sub>6</sub>H<sub>6</sub>), and 1,3-butadiene (C<sub>4</sub>H<sub>6</sub>); those that are derived from stationary sources: perchloroethylene (C<sub>2</sub>Cl<sub>4</sub>) and hexavalent chromium (Cr(VI)); and those derived from photochemical reactions of emitted VOCs: formaldehyde (CH<sub>2</sub>O) and acetaldehyde (C<sub>2</sub>H<sub>4</sub>O)<sup>1</sup>. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk. (UC, 2024a, pp. 32-33)

### Mobile Source TACs

CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. In California, light-duty vehicles sold after 1996 are equipped with California's second-generation On-Board Diagnostic (OBD-II) system. The OBD-II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. If a problem is detected, the OBD-II system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase "Check Engine" or "Service Engine Soon." The system would also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. CARB has recently developed similar OBD requirements for heavy-duty vehicles over 14,000 pounds (lbs). CARB's phase II Reformulated Gasoline Regulation (RFG-2), adopted in 1996, also led to a reduction of mobile source emissions. Through such regulations, benzene levels declined 88% from 1990-2012. 1,3-Butadiene

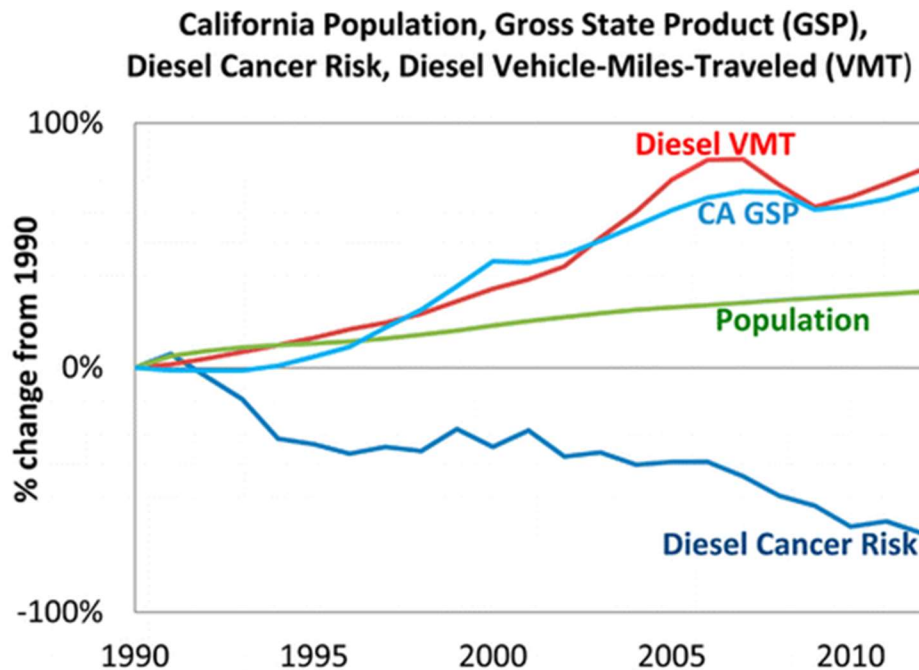
<sup>1</sup> It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.



concentrations also declined 85% from 1990-2012 as a result of the use of reformulated gasoline and motor vehicle regulations. (UC, 2024a, p. 33)

In 2000, CARB's Diesel Risk Reduction Plan (DRRP) recommended the replacement and retrofit of diesel-fueled engines and the use of ultra-low-sulfur (<15 ppm) diesel fuel. As a result of CARB's programs, diesel emissions and their associated TACs fell by approximately 68 percent since 2000 despite an approximately 31 percent increase in the State's population and an approximately 81 percent increase in miles traveled by diesel vehicles during that same time period, as shown on Figure 4.1-9, *DPM and Diesel Vehicle Miles Trend*. With the implementation of these diesel-related control regulations, CARB expects a DPM decline of 71% for 2000-2020. (UC, 2024a, p. 33)

**Figure 4.1-9 DPM and Diesel Vehicle Miles Trend**



(UC, 2024a, Exhibit 2-A)

### ***Diesel Regulations***

CARB and the Ports of Los Angeles and Long Beach (POLA and POLB) have adopted several iterations of regulations for diesel trucks that are aimed at reducing DPM. More specifically, CARB Drayage Truck Regulation, CARB statewide On-road Truck and Bus Regulation, and the Ports of Los Angeles and Long Beach Clean Truck Program (CTP) require accelerated implementation of “clean trucks” into the statewide truck fleet. In other words, older more polluting trucks would be replaced with newer, cleaner trucks as a function of these regulatory requirements. Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, would dramatically be reduced due to the aforementioned regulatory requirements. Diesel emissions identified in this analysis would therefore overstate future DPM emissions since not all the regulatory requirements are reflected in the modeling. (UC, 2024a, p. 34)



### **Cancer Risk Trends**

Based on information available from CARB, overall cancer risk throughout the SCAB has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study called the Multiple Air Toxics Exposure Study (MATES). DPM accounts for more than 70% of the cancer risk. (UC, 2024a, p. 34)

In January 2018, as part of the overall effort to reduce air toxics exposure in the SCAB, SCAQMD began conducting the MATES V Program. MATES V field measurements were conducted at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V also included measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV. The final report for the MATES V study was published August 2021. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in South Coast AQMD's programs such as permitting, Air Toxics Hot Spots (AB2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic non-cancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazard Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. As noted above, the quadrant in which the Project Site is located has a predicted cancer risk of 492 in one million. (UC, 2024a, p. 35)

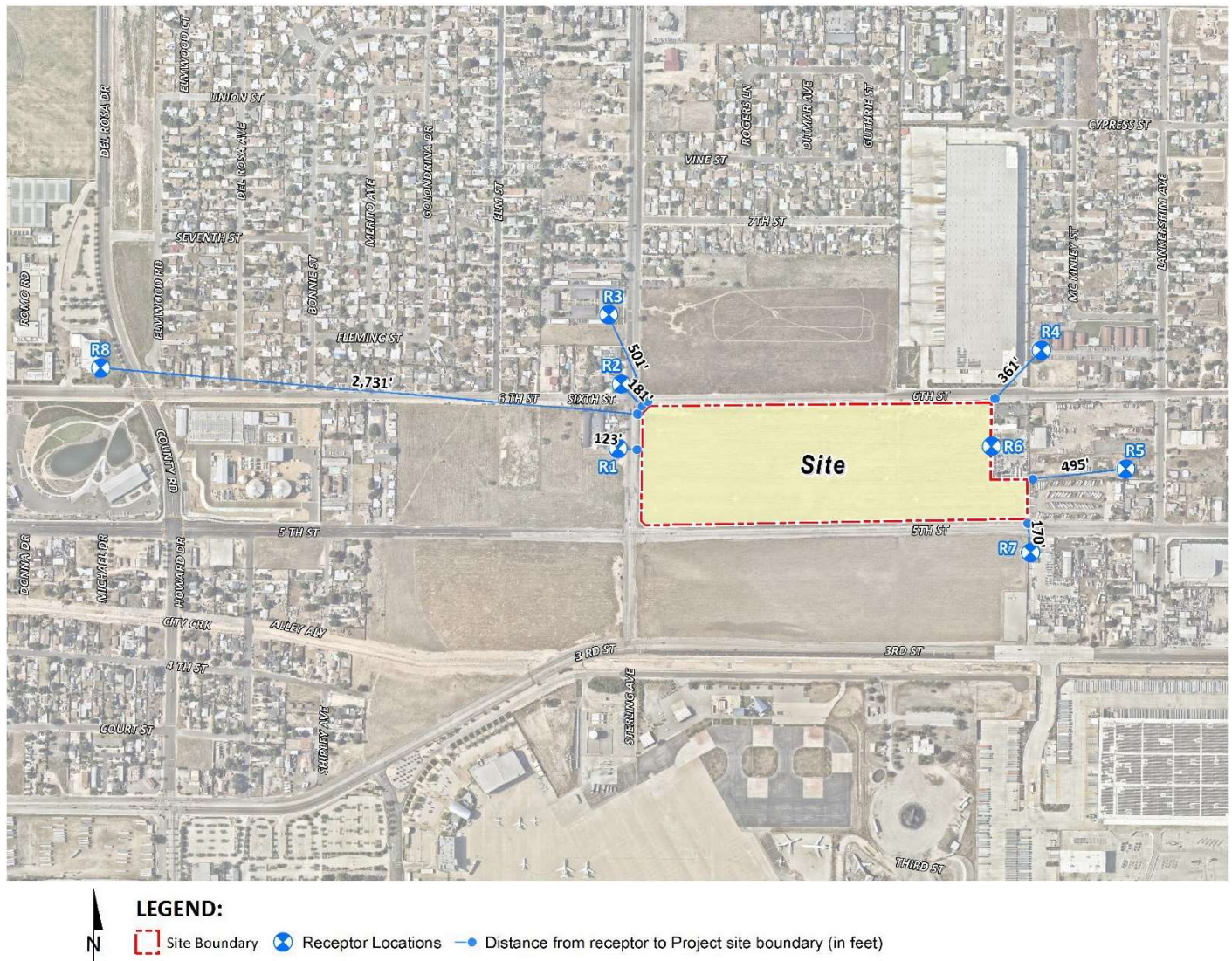
### **F. Sensitive Receptors**

Sensitive receptors in the Project study area are described below and shown on Figure 4.1-10, *Sensitive Receptor Locations*. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project Site. All distances are measured from the Project Site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project Site.

- R1: Location R1 represents the existing residence at 7926 Sterling Avenue, approximately 123 feet west of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receptor R1 is placed at the building façade.
- R2: Location R2 represents the existing residence at 7890 Sterling Avenue, approximately 181 feet northwest of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receptor R2 is placed at the building façade.
- R3: Location R3 represents Bella Apartment community at 7832 Sterling Avenue, approximately 501 feet northwest of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receptor R3 is placed at the building façade.



Figure 4.1-10 Sensitive Receptor Locations



(UC, 2024a, Exhibit 3-A)

- R4: Location R4 represents Villa De La Rosa Apartment community at 7862 Lankershim Avenue, approximately 361 feet northeast of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receptor R4 is placed at the building façade.
- R5: Location R5 represents the existing residence at 7974 Lankershim Avenue, approximately 495 feet east of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receptor R5 is placed at the building façade.
- R6: Location R6 represents Amanda Towing at 2285 6<sup>th</sup> Street, immediately adjacent to the east side of the Project Site. Receptor R6 is placed at the building façade.



- R7: Location R7 represents Good Auto & Truck Repair LLC at 2355 5<sup>th</sup> Street, approximately 170 feet south of the Project Site. Receptor R7 is placed at the building façade.
- R8: Location R8 represents Indian Springs High School Performing Arts Center at 650 N Del Rosa Drive, approximately 2,731 feet west of the Project Site. Receptor R8 is placed at the building façade.

#### 4.1.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to the issue of air quality.

##### **A. Federal Plans, Policies, and Regulations**

##### **1. Federal Clean Air Act**

The Clean Air Act (CAA; 42 U.S.C. § 7401 *et seq.*) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants, which include O<sub>3</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. (EPA, 2023a)

One of the goals of the CAA was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The CAA was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. (EPA, 2023a)

The sections of the federal CAA most directly applicable to the development of the Project Site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions address the urban air pollution problems of ozone (smog), carbon monoxide (CO), and particulate matter (PM<sub>10</sub>). Specifically, it clarifies how areas are designated and re-designated "attainment." It also allows EPA to define the boundaries of "nonattainment" areas: geographical areas whose air quality does not meet federal air quality standards designed to protect public health. (EPA, 2023b) Mobile source emissions are regulated in accordance with the CAA Title II provisions. These standards are intended to reduce tailpipe emissions of hydrocarbons, CO, and NO<sub>x</sub> on a phased-in basis that began in model year 1994. Automobile manufacturers also are required to reduce vehicle emissions resulting from the evaporation of gasoline during refueling. These provisions further require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. (EPA, 2023c)

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. Prior to 1990, CAA established a risk-based program under which only a few standards were developed. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. "Major sources" are defined as a stationary source or group of stationary sources that



emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An "area source" is any stationary source that is not a major source. (EPA, 2023a)

For major sources, Section 112 requires that EPA establish emission standards that require the maximum degree of reduction in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category, EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk. (EPA, 2023a)

## **2. *National Emissions Standards for Hazardous Air Pollutants (NESHAPs) Program***

National Emission Standards for Hazardous Air Pollutants (NESHAP) are stationary source standards for hazardous air pollutants. Hazardous air pollutants (HAPs) are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The EPA develops national enforcement initiatives that focus on significant environmental risks and noncompliance patterns. For Fiscal Years 2014 to 2016, the Cutting Hazardous Air Pollutants National Initiatives Strategy focuses on categories of sources that emit HAPs. (EPA, 2024a)

Sources subject to NESHAPs are required to perform an initial performance test to demonstrate compliance. To demonstrate continuous compliance, sources are generally required to monitor control device operating parameters which are established during the initial performance test. Sources may also be required to install and operate continuous emission monitors to demonstrate compliance. Consistent with EPA's Clean Air Act Stationary Source Compliance Monitoring Strategy, NESHAP sources that meet the Clean Air Act definition of "major source" generally receive a full compliance evaluation by the state or regional office at least once every two years. (EPA, 2024a)

## **3. *SmartWay Program***

The US EPA's SmartWay Program is a voluntary public-private program developed in 2004, which 1) provides a comprehensive and well-recognized system for tracking, documenting and sharing information about fuel use and freight emissions across supply chains; 2) helps companies identify and select more efficient freight carriers, transport modes, equipment, and operational strategies to improve supply chain sustainability and lower costs from goods movement; 3) supports global energy security and offsets environmental risk for companies and countries; and 4) reduces freight transportation-related emissions by accelerating the use of advanced fuel-saving technologies. This program is supported by major transportation industry associations, environmental groups, State and local governments, international agencies, and the corporate community. (EPA, 2023d)



***B. State Plans, Policies, and Regulations***

***1. California Clean Air Act (CCAA)***

The California Clean Air Act (CCAA) establishes numerous requirements for district plans to attain state ambient air quality standards for criteria air contaminants. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the State's ambient air quality standards, the California Ambient Air Quality Standards (CAAQS), by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, established standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. Generally, the CAAQS are more stringent than the NAAQS. For districts with serious air pollution, its attainment plan should include the following: no net increase in emissions from new and modified stationary sources; and best available retrofit technology for existing sources. (SCAQMD, n.d.)

***2. Air Toxic "Hot Spots" Information and Assessment Act***

The Air Toxic "Hot Spots" Information and Assessment Act of 1987, commonly known as AB 2588, (Health & Safety Code §§ 44300, et seq.) requires facilities emitting specified quantities of pollutants to conduct risk assessments describing the health impacts to neighboring communities created by their emissions of numerous specified hazardous compounds. If the district determines the health impact to be significant, neighbors must be notified. In addition, state law requires the facility to develop and implement a plan to reduce the health impacts to below significance, generally within five years. Additional control requirements for hazardous emissions from specific industries are established by the state and enforced by districts. (SCAQMD, n.d.)

***3. Air Quality Management Planning***

The California Air Resources Board (CARB) and local air districts throughout the State are responsible for developing clean air plans to demonstrate how and when California will attain air quality standards established under both the CAA and CCAA. For the areas within California that have not attained air quality standards, CARB works with local air districts to develop and implement State and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. Air quality planning activities undertaken by CARB also include the development of policies, guidance, and regulations related to State and federal ambient air quality standards; coordination with local agencies on transportation plans and strategies; and providing assistance to local districts and transportation agencies. (CARB, n.d.)

***4. Title 24 Energy Efficiency Standards and California Green Building Standards***

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result



in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: (1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; (2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; and (3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and strengthening ventilation standards to improve indoor air quality. The 2019 Building Energy Efficiency Standards already were seven (7) percent more efficient than the previous (2016) Building Energy Efficiency Standards for residential construction and 30 percent more efficient than the previous Standards for non-residential construction. The 2016 Building Energy Efficiency Standards also already were 28 percent more efficient for residential construction and five (5) percent more efficient for nonresidential construction than the 2013 Building Energy Efficiency Standards they replaced. (CEC, 2023)

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

As previously stated, the Title 24 Building Energy Efficient Standards and CALGreen Code are updated on a regular basis, with the most recent approved updates consisting of the 2022 Building Energy Efficiency Standards and 2022 CALGreen Code, which became effective on January 1, 2023. Non-residential mandatory measures included in the 2022 CALGreen Code include:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).



- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
  - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
  - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
  - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).



- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

## **5. *California Air Resources Board Rules***

The CARB enforces rules related to air pollutant emissions in the State of California. Rules with applicability to the Project include, but are not limited to, those listed below.

- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, which limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485 (13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, which limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449 (13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, which limits nonessential idling to five minutes or less for diesel-powered off-road equipment.

## **6. *Truck & Bus Regulation***

Under the Truck and Bus Regulation, adopted by CARB in 2008, all diesel truck fleets operating in California are required to adhere to an aggressive schedule for upgrading and replacing heavy-duty truck engines. Older, more polluting trucks are required to be replaced first, while trucks that already have relatively clean engines are not required to be replaced until later. Pursuant to the Truck and Bus Regulation, all pre-1994 heavy trucks



(trucks with a gross vehicle weight rating greater than 26,000 pounds) were to be removed from service on California roads by 2015. Between 2015 and 2020, pre-2000 heavy trucks will be equipped with PM filters and will be upgraded or replaced with an engine that meets 2010 emissions standards. The upgrades/replacements will occur on a rolling basis based on model year. By 2023, all heavy trucks operating on California roads must have engines that meet 2010 emissions standards. Lighter trucks (those with a gross vehicle weight rating of 14,001 to 26,000 pounds) must adhere to a similar schedule, and will all be replaced by 2020. (CARB, n.d.)

## **7. *Advanced Clean Truck Regulation***

In June 2020, CARB adopted a new rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California will be required to be zero-emission. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day. Commercial availability of electric-powered long-haul trucks is very limited. However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future. (CARB, 2021)

## **8. *Senate Bill 535 – Disadvantaged Communities***

Senate Bill 535 (“SB 535”; De León, Chapter 830, 2012) recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality. Disadvantaged communities in California are specifically targeted for investment of proceeds from the State’s cap-and-trade program. These investments are aimed at improving public health, quality of life, and economic opportunity in California’s most burdened communities while at the same time reducing pollution that causes climate change. Authorized by the California Global Warming Solutions Act of 2006 (AB 32), the State’s cap-and-trade program is one of several strategies that California uses to reduce greenhouse gas emissions that cause climate change. The funds must be used for programs that further reduce emissions of greenhouse gases. SB 535 requires that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 4.0 (CalEnviroScreen). (OEHHA, 2023)

The Project Site’s Census Tract 6071007601 is designated as a disadvantaged community. It is ranked by the State as being in the 48<sup>th</sup> percentile for pollution burden which, based on the Census Tract’s demographic characteristics, results in the Office of Environmental Health Hazard Assessment (OEHHA) ranking the area



in the 82<sup>nd</sup> percentile of communities that are disproportionately burdened by multiple sources of pollution. OEHHA's CalEnviroScreen 4.0, is a screening methodology that the State uses to identify California communities that are disproportionately burdened by multiple sources of pollution. The CalEnviroScreen 4.0 indicators for the Project Site's Census Tract were shown in Table 2-1 in EIR Section 2.0, *Environmental Setting*. As indicated in Table 2-1, for the Project Site's Census Tract, the highest environmental exposures from air pollutants are from ozone (O<sub>3</sub>), drinking water contamination, and lead in housing. The highest human health hazard factors in the Project Site's Census Tract include compromised health conditions related to low levels of educational attainment, linguistic isolation, poverty, unemployment, and housing burden. (OEHHA, 2023; CalEPA, 2022)

## **9. *Assembly Bill 617***

Assembly Bill 617 (AB 617) was enacted into law in 2017 and relates to criteria air pollutants and toxic air contaminants from sources other than vehicles. In response to AB 617, the California Air Resources Board (CARB) established the Community Air Protection Program (CAPP or Program). The Program's focus is to reduce exposure in communities most impacted by air pollution. Communities around the State are working together to develop and implement new strategies to measure air pollution and reduce health impacts. This first-of-its-kind statewide effort includes community air monitoring and community emissions reduction programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air. (CARB, n.d.)

### **C. *Local Plans, Policies, and Regulations***

#### **1. *SCAQMD Air Quality Management Plan***

Under existing conditions, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, and in conformance with California Health & Safety Code Section 40702 et seq. and the California CAA, the SCAQMD adopted an Air Quality Management Plan (AQMP) to plan for the improvement of regional air quality. AQMPs are updated regularly in order to more effectively reduce emissions and accommodate growth. Each version of the plan is an update of the previous plan and has a 20-year horizon with a revised baseline. The SCAQMD's most recent iteration of the AQMP was adopted in December 2022 (the 2022 Air Quality Management Plan (AQMP)), which incorporates the latest scientific and technological information and local and regional land development plans, including the Southern California Association of Governments (SCAG) *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS; also referred to as "Connect SoCal"). The 2022 AQMP is based on current emissions modeling data, recent motor vehicle emissions information, and demographic data/projections provided by SCAG. The air quality pollutant levels projected in the 2022 AQMP are based on the assumption that buildout of the region will occur in accordance with local general plans and specific plans, and in accordance with growth projections identified by SCAG in its 2020-2045 RTP/SCS. (SCAQMD, 2022)



## 2. *Applicable SCAQMD Rules*

The SCAQMD Rules that are applicable to construction and operation of the Project, and are included as City Regulations and Design Requirements (CRDRs), include, but are not limited to: Rule 402 (Nuisance); Rule 403 (Fugitive Dust); Rule 1113 (Architectural Coatings); Rule 1301 (General); Rule 1401 (New Source Review of Toxic Air Contaminants); and Rule 2305 (Warehouse Indirect Source Rule). (UC, 2024a, pp. 8-9) Rule 402 prohibits the discharge of air contaminants that cause nuisance or annoyance to any considerable number of persons or to the public (SCAQMD, 1976). Rule 403 requires the implementation of best available dust control measures (BACMs) during activities capable of generating fugitive dust. Rule 403 also requires activities defined as “large operations” to notify the SCAQMD by submitting specific forms; a large operation is defined as any active operation on property containing 50 or more acres of disturbed surface area; or any earth moving operation with a daily earth-moving or throughput volume of 3,850 cubic meters (5,000 cubic yards), three times during the most recent 365-day period. (SCAQMD, 2005) Rule 1113 requires all buildings within the SCAQMD to adhere to the VOC limits for architectural coatings (SCAQMD, 2016). Rule 1301 requires new or relocated facilities to provide pre-construction review requirements to ensure that new or relocated facilities do not interfere with progress in attainment of the NAAQS (SCAQMD, 1995). Rule 1401 states a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart (SCAQMD, 2017). Rule 2305 requires all operators of warehouses greater than or equal to 100,000 s.f. of indoor floor space to implement measures that reduce nitrogen oxides and particulate matter emissions and/or pay a fee to fund programs to improve regional air quality. (SCAQMD, 2021)

## 3. *City of San Bernardino General Plan*

The City of San Bernardino General Plan Natural Resources and Conservation Element (NRCE) identifies goals and policies that are intended to ensure actions are undertaken to incrementally reduce the City’s share of emissions and protect its residents. The Air Quality subsection of the NRCE addresses ambient air quality standards set forth by the EPA and CARB. The Air Quality subsection contains policies designed to establish a regional basis for improving air quality. The following relevant and applicable policies from the City of San Bernardino General Plan NRCE have been identified for the Project (San Bernardino, 2005a, pp. 12-17 through 12-22):

- **Goal 12.5:** Promote air quality that is compatible with the health, well being, and enjoyment of life.
  - **Policy 12.5.1:** Reduce the emission of pollutants including carbon monoxide, oxides of nitrogen, photochemical smog, and sulfate in accordance with South Coast Air Quality Management District (SCAQMD) standards.
  - **Policy 12.5.2:** Prohibit the development of land uses (e.g. heavy manufacturing) that will contribute significantly to air quality degradation, unless sufficient mitigation measures are undertaken according SCAQMD standards.
  - **Policy 12.5.3:** Require dust abatement measures during grading and construction operations.



- Policy 12.5.4: Evaluate the air emissions of industrial land uses to ensure that they will not impact adjacent uses.
- **Goal 12.6**: Reduce the amount of vehicular emissions in San Bernardino.
  - Policy 12.6.1: Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services and provides, to the fullest extent possible, local job opportunities and commercial service to minimize vehicular travel and associated air emissions.
  - Policy 12.6.3: Install streetscape improvements and other amenities to encourage pedestrian activity in key City areas and reduce vehicular travel and associated air emissions.
  - Policy 12.6.5: Require qualifying development to implement or participate in transportation demand management programs, which provide incentives for car pooling, van pools, and the use of public transit and employ other trip reduction techniques (consistent with the Circulation Element and South Coast Air Quality Management Plan).

#### 4.1.3 BASIS FOR DETERMINING SIGNIFICANCE

Based on the results of the Project's Initial Study (*Technical Appendix A*), it was determined that the Project has the potential to result in a significant impact to air quality if the Project or any Project-related component would:

- a. *Conflict with or obstruct implementation of the applicable air quality plan;*
- b. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; or*
- c. *Expose sensitive receptors to substantial pollutant concentrations.*

The above-listed thresholds are derived directly from Section III of Appendix G to the CEQA Guidelines and address the typical, adverse effects related to air quality that could result from development projects. Refer also to the Project's Initial Study (*Technical Appendix A*) and EIR subsection 5.4.3 for a discussion of potential impacts to air quality (i.e., odors) that were determined to be less than significant as part of the Project's scoping process.

The Project would result in a significant impact under Threshold a. if the Project were determined to conflict with the *SCAQMD 2022 AQMP*. Pursuant to Chapter 12, Sections 12.2 and 12.3, of the *SCAQMD CEQA Air Quality Handbook*, a project would conflict with the *AQMP* if either of the following conditions were to occur (UC, 2024a, pp. 66-67):

- The Project would increase the frequency or severity of existing NAAQS and/or CAAQS violations, cause or contribute to new air quality violations, or delay the attainment of interim air quality standards;  
or



- The Project would exceed the 2022 AQMP's future year buildout assumptions.

For evaluation under Threshold b., implementation of the Project would result in a direct and cumulatively-considerable impact if the Project's construction and/or operational activities exceed one or more of the SCAQMD's "Regional Thresholds" for criteria pollutant emissions. The "Regional Thresholds" established by SCAQMD for criteria pollutants are summarized in Table 4.1-4, *Maximum Daily Regional Emissions Thresholds*. (UC, 2024a, p. 44)

**Table 4.1-4 Maximum Daily Regional Emissions Thresholds**

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day  
(UC, 2024a, Table 3-1)

For evaluation under Threshold c., the Project would result in a significant impact if any of the following were to occur:

- The Project's localized criteria pollutant emissions during either construction or long-term operation would exceed one or more of the SCAQMD "Localized Significance Thresholds (LSTs)" listed in Table 4.1-5, *Maximum Daily Localized Construction Emissions Thresholds*, and Table 4.1-6, *Maximum Daily Localized Operational Emissions Thresholds*;
- The Project would cause or contribute to a CO "Hot Spot;" and/or
- The Project's toxic air contaminant emissions, such as DPM, would expose sensitive receptor populations to an incremental cancer risk of greater than 10 in one million people; and/or result in a non-carcinogenic health risk rating ("Acute Hazard Index") greater than 1.0.

**Table 4.1-5 Maximum Daily Localized Construction Emissions Thresholds**

Construction Activity	Construction Localized Thresholds			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Site Preparation	220 lbs/day	1,366 lbs/day	22 lbs/day	7 lbs/day
Grading	270 lbs/day	1,754 lbs/day	29 lbs/day	9 lbs/day

(UC, 2024a, Table 3-12)



Table 4.1-6 Maximum Daily Localized Operational Emissions Thresholds

Operational Localized Thresholds			
NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
270 lbs/day	1,746 lbs/day	7 lbs/day	2 lbs/day

(UC, 2024a, Table 3-15)

#### 4.1.4 METHODOLOGY FOR CALCULATING PROJECT-RELATED AIR QUALITY IMPACTS

##### A. Air Quality Modeling

##### 1. **California Emissions Estimator Model (CalEEMod)**

Land uses such as the Project affect air quality through construction-source and operational-source emissions. In May 2023, California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released the latest version of CalEEMod version 2022.1.1.12. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) and Greenhouse Gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 3.1 through 3.2 of the Project's AQIA (*Technical Appendix CI*). (UC, 2024a, p. 38)

##### 2. **Emission Factors Model (EMFAC)**

Vehicle DPM emissions were calculated using emission factors for particulate matter less than 10µm in diameter (PM<sub>10</sub>) generated with the 2021 version of the Emission FACtor model (EMFAC) developed by the CARB. EMFAC 2021 is a mathematical model that CARB developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2021, incorporates regional motor vehicle data, information and estimates regarding the distribution of VMT by speed, and number of starts per day. (UC, 2024b, p. 15)

Several distinct emission processes are included in EMFAC 2021. Emission factors calculated using EMFAC 2021 are expressed in units of grams per vehicle miles traveled (g/VMT) or grams per idle-hour (g/idle-hr), depending on the emission process. The emission processes and corresponding emission factor units associated with diesel particulate exhaust for this Project are presented below. (UC, 2024b, p. 15)

For this Project, annual average PM<sub>10</sub> emission factors were generated by running EMFAC 2021 in EMFAC Mode for vehicles in the San Bernardino County jurisdiction. The EMFAC Mode generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. The vehicle travel speeds for each segment modeled are summarized below. (UC, 2024b, p. 15)



- Idling – on-site loading/unloading and truck gate
- 5 miles per hour – on-site vehicle movement including driving and maneuvering
- 25 miles per hour – off-site vehicle movement including driving and maneuvering.

It is expected that minimal idling would occur at nearby intersections during truck travel on study area roadways (e.g., at an intersection during a red light, or yielding to make a turn). Notwithstanding, the analysis conservatively utilizes a reduced off-site average speed of 25 miles per hour (below the posted speed limit) for travel on study area roadways, use of a lower average speed for off-site travel results in a higher emission factor and therefore any negligible idling that would occur during truck travel along the study area is accounted for. (UC, 2024b, p. 15)

Calculated emission factors are shown in Table 4.1-7, *2026 Weighted Average DPM Emission Factors*. As a conservative measure, a 2026 EMFAC 2021 run was conducted and a static 2026 emissions factor data set was used for the entire duration of analysis herein (e.g., 30 years). Use of 2026 emission factors would overstate potential impacts since this approach assumes that emission factors remain “static” and do not change over time due to fleet turnover or cleaner technology with lower emissions that would be incorporated into vehicles after 2026. Additionally, based on EMFAC 2021, Light-Heavy-Duty Trucks are comprised of 52.3% diesel, Medium-Heavy-Duty Trucks are comprised of 91.8% diesel, and Heavy-Heavy-Duty Trucks are comprised of 85.1% diesel. Trucks fueled by diesel are accounted for by these percentages accordingly in the emissions factor generation. Appendix 2.2 to the Project’s HRA (*Technical Appendix C2*) includes additional details on the emissions estimates from EMFAC. (UC, 2024b, pp. 15-16)

**Table 4.1-7 2026 Weighted Average DPM Emission Factors**

Speed	Weighted Average
0 (idling)	0.07336 (g/idle-hr)
5	0.01763 (g/mile)
25	0.00754 (g/mile)

(UC, 2024b, Table 2-3)

The vehicle DPM exhaust emissions were calculated for running exhaust emissions. The running exhaust emissions were calculated by applying the running exhaust PM<sub>10</sub> emission factor (g/VMT) from EMFAC over the total distance traveled. Refer to subsection 2.3.1 of the Project’s HRA (*Technical Appendix C2*) for a discussion of formulas used to estimate off-site DPM exhaust emissions. (UC, 2024b, p. 16)

Similar to off-site traffic, on-site vehicle running emissions were calculated by applying the running exhaust PM<sub>10</sub> emission factor (g/VMT) from EMFAC and the total vehicle trip number over the length of the driving path using the same formula presented above for on-site emissions. In addition, on-site vehicle idling exhaust emissions were calculated by applying the idle exhaust PM<sub>10</sub> emission factor (g/idle-hr) from EMFAC and the total truck trip over the total assumed idle time (15 minutes). Refer to subsection 2.3.1 of the Project’s HRA



(*Technical Appendix C2*) for a discussion of formulas used to estimate on-site vehicle idling emissions for each vehicle class. (UC, 2024b, p. 16)

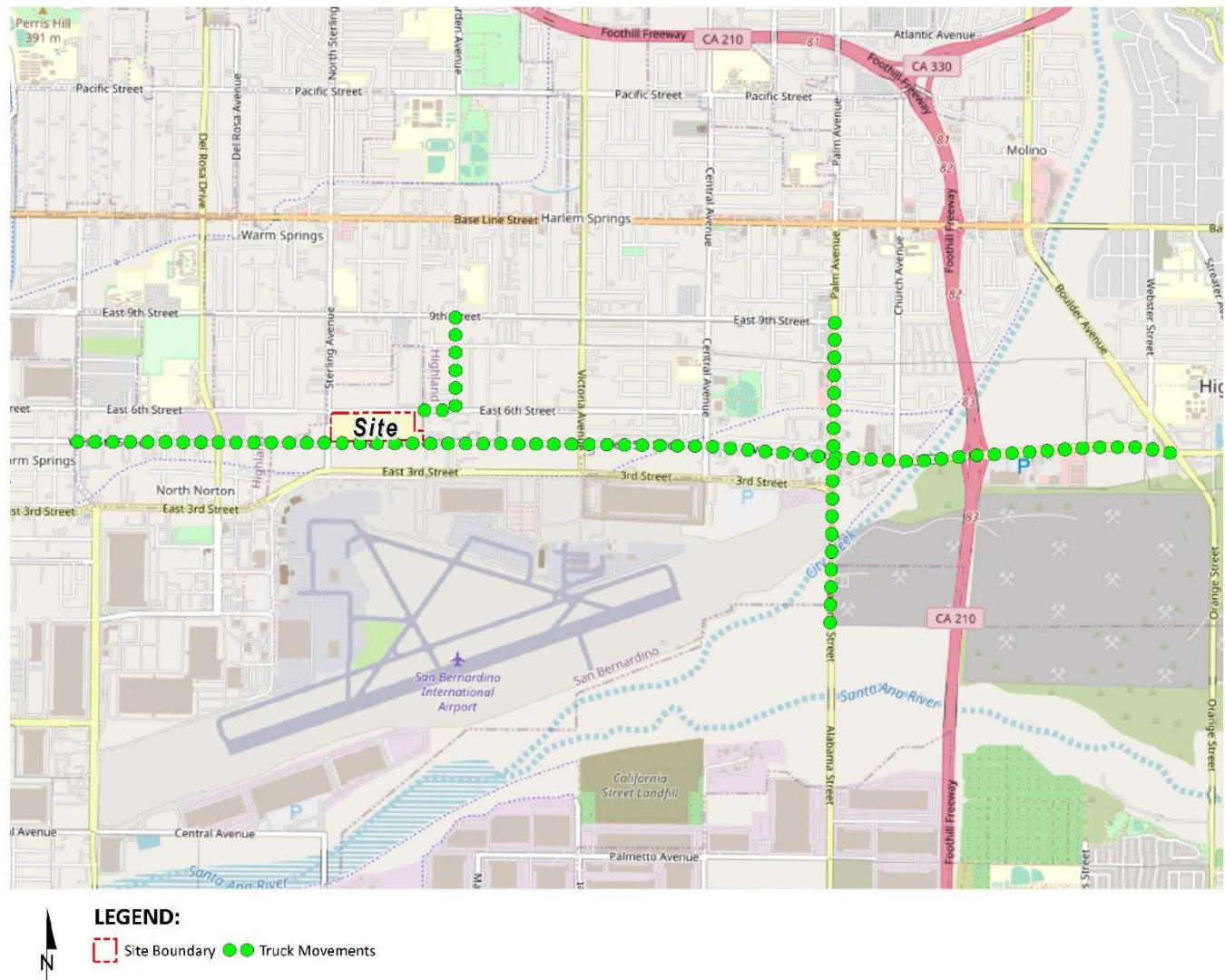
Each roadway was modeled as a line source (made up of multiple adjacent volume sources). Due to the large number of volume sources modeled for this analysis, the corresponding coordinates of each volume source have not been included in the Project's HRA but are included in Appendix 2.3 to the HRA (*Technical Appendix C2*). The DPM emission rate for each line volume source was calculated by multiplying the emission factor (based on the average travel speed along the roadway) by the number of trips and the distance traveled along each roadway segment, as illustrated on Table 2-4 of the Project's HRA. In order to model idling emissions, line sources were modeled at the building loading docks and tractor trailer parking stalls. The modeled on-site emission sources are illustrated on Exhibit 2-B of the Project's HRA, while Figure 4.1-11, *Modeled Off-Site Emission Sources*, shows the modeled locations for the off-site emission sources. The modeling domain is limited to the Project's primary truck route and includes off-site sources in the study area for more than  $\frac{3}{4}$  mile. This modeling domain is more inclusive and conservative than using only a  $\frac{1}{4}$  mile modeling domain which is the distance supported by several reputable studies which conclude that the greatest potential risks occur within a  $\frac{1}{4}$  mile of the primary source of emissions (in the case of the Project, the primary source of emissions is the on-site idling and on-site travel). (UC, 2024b, pp. 16-17)

On-site truck idling was estimated to occur as trucks enter and travel through the Project Site, as well as in truck parking areas. Although the Project's diesel-fueled truck and equipment operators would be required by State law to comply with CARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions be calculated assuming 15 minutes of truck idling, which would take into account on-site idling that occurs while the trucks are waiting to pull up to the truck bays, idling at the bays, idling at check-in and check-out, etc. As such, this analysis calculates truck idling at 15 minutes, consistent with SCAQMD's recommendation. (UC, 2024b, p. 17)

Based on the results of the Project's Traffic Analysis ("TA"; EIR *Technical Appendix L1*), the proposed Project is expected to generate a total of approximately 782 actual vehicular trip-ends per day (391 vehicles inbound + 391 vehicles outbound) which includes 658 passenger vehicle trips (329 passenger vehicles inbound + 329 passenger vehicles outbound) and 124 two-way truck trips (62 trucks inbound per day + 62 trucks outbound) per day. (UC, 2024b, p. 17)



Figure 4.1-11 Modeled Off-Site Emission Sources



(UC, 2024b, Exhibit 2-C)

## **B. Methodology for Calculating Project Criteria Pollutant Emissions**

### **1. Construction Activities**

Construction activities associated with the Project would result in emissions of VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction-related emissions are expected from the following construction activities: 1) site preparation; 2) grading; 3) building construction; 4) paving; and 5) architectural coating. (UC, 2024a, p. 38)

#### **Grading Activities**

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions”. Fugitive dust



emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. This analysis assumes that earthwork activities are expected to balance on site and no import or export of soils would be required. (UC, 2024a, p. 38)

### ***Off-Site Utility and Infrastructure Improvements***

In addition, to support the Project development, there will be off-site improvements associated with shell construction, including extension of the SCE electrical service to the site, street widening, sidewalks, and curbs as well as erosion control, including building a gutter to control run-off. It is expected that the off-site construction activities would not take place at one location for the entire duration of construction. Impacts associated with these activities are not expected to exceed the emissions identified for Project-related construction activities since the off-site construction areas would have physical constraints on the amount of daily activity that could occur. The physical constraints would limit the amount of construction equipment that could be used, and any off-site and utility infrastructure construction would not use equipment totals that would exceed the equipment totals previously presented in EIR Table 3-2. (UC, 2024a, pp. 38-39)

### ***On-Road Trips***

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. The number of workers and vendor trips are presented below in Table 4.1-8, *Construction Trip Assumptions*. It should be noted that for Vendor Trips, specifically, CalEEMod only assigns Vendor Trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. It should be noted that as paving and architectural coating activities overlap with building construction, the vendor trips assigned to building construction activities are assumed to be the same trips used to cover paving and architectural coating. As such, the CalEEMod defaults for Vendor Trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity.

**Table 4.1-8 Construction Trip Assumptions**

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day
Site Preparation	18	4
Grading	25	8
Building Construction	234	79
Paving	15	0
Architectural Coating	47	0

(UC, 2024a, Table 3-2)

### ***Construction Duration***

Refer to EIR subsection 3.6.1.B and EIR Table 3-1 for a description of the duration of anticipated construction activities.



### ***Construction Equipment***

Refer to EIR subsection 3.6.1.B and EIR Table 3-2 for a description of the duration of anticipated construction equipment.

## **2. Operational Activities**

Operational activities associated with the Project would result in emissions of VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational emissions are expected from the following primary sources: area source emissions, energy source emissions, mobile source emissions, on-site cargo handling equipment emissions, and stationary source emissions, each of which is discussed below. (UC, 2024a, p. 42)

### **☐ Area Source Emissions**

#### ***Architectural Coatings***

Over a period of time the buildings that are part of this Project would require maintenance and would therefore produce emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings. The emissions associated with architectural coatings were calculated using CalEEMod. (UC, 2024a, p. 43)

#### ***Consumer Products***

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod. (UC, 2024a, p. 43)

#### ***Landscape Maintenance Equipment***

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. (UC, 2024a, p. 43)

### **☐ Energy Source Emissions**

#### ***Combustion Emissions associated with Natural Gas and Electricity***

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from off-site generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. Based on information provided by the Project applicant, the site is not expected to utilize natural gas for the



building envelope, and therefore would not generate any emissions from direct energy consumption. Additionally, the Project will include the installation of solar, which is expected to generate approximately 365,000 kWh per year. (UC, 2024a, p. 43)

#### ☐ **Mobile-Source Emissions**

The Project-related operational air quality emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the Project's TA (EIR *Technical Appendix L1*) were utilized in the analysis. (UC, 2024a, p. 43) No cold storage is being proposed as part of the Project.

#### ***Approach for Analysis of the Project***

In order to determine emissions from passenger car vehicles, CalEEMod defaults for trip length and trip purpose were utilized. Default vehicle trip lengths for primary trips will be populated using data from the local metropolitan planning organizations/Regional Transportation Planning Agencies (MPO/RTPA). Trip type percentages and trip lengths provided by MPO/RTPAs truncate data at their demonstrative borders. This analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1<sup>2</sup> & LDT2<sup>3</sup>), Medium-Duty-Vehicles (MDV), and Motorcycles (MCY) vehicle types. In order to account for emissions generated by passenger cars, the fleet mix in Table 4.1-9, *Passenger Car Fleet Mix*, was utilized. (UC, 2024a, p. 44)

**Table 4.1-9 Passenger Car Fleet Mix**

Land Use	% Vehicle Type				
	LDA	LDT1	LDT2	MDV	MCY
High-Cube Transload Warehouse	54.21%	4.28%	22.60%	16.64%	2.27%

Note: The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the default CalEEMod percentages assigned to LDA, LDT1, LDT2, and MDV vehicle types.

(UC, 2024a, Table 3-7)

To determine emissions from trucks for the proposed industrial uses, the analysis incorporated the SCAQMD recommended truck trip length of 15.3 miles for 2-axle (LHDT1<sup>4</sup>, LHDT2<sup>5</sup>), 14.2 miles for 3-axle (MHDT) trucks, and 39.9 miles for 4+-axle (HHDT) trucks and weighting the average trip lengths using traffic trip percentages. The trip length function for the high-cube transload warehouse use has been conservatively calculated to 30.54 miles, respectively, with an assumption of 100% primary trips for the proposed industrial land uses. This trip length assumption is higher than the CalEEMod defaults for trucks. The truck fleet mix is estimated by rationing the trip rates for each truck type based on information provided by the SCAQMD

<sup>2</sup> Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

<sup>3</sup> Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

<sup>4</sup> Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.

<sup>5</sup> Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.



recommended truck mix, by axle type. Heavy trucks are broken down by truck type (or axle type) and are categorized as either Light-Heavy-Duty Trucks (LHDT1 & LHDT2)/2-axle, Medium-Heavy-Duty Trucks (MHDT)/3-axle, and Heavy-Heavy-Duty Trucks (HHDT)/4+-axle. To account for emissions generated by trucks, the fleet mix in Table 4.1-10, *Truck Fleet Mix*, was utilized. (UC, 2024a, p. 44)

**Table 4.1-10 Truck Fleet Mix**

Land Use	% Vehicle Type			
	LHDT1	LHDT2	MHDT	HHDT
High-Cube Transload Warehouse	12.67%	3.46%	20.97%	62.90%

Note: Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT1, LHDT2, MHDT, and HHDT) relative to the total number of truck trips.  
(UC, 2024a, Table 3-8)

### ***Fugitive Dust Related to Vehicular Travel***

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimate for travel on paved roads were calculated using CalEEMod. (UC, 2024a, p. 45)

#### **On-Site Cargo Handling Equipment Source Emissions**

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this Project, on-site modeled operational equipment includes up to three (3) 200 horsepower (hp), diesel-powered cargo handling equipment pieces operating at 8 hours a day<sup>8</sup> for 365 days of the year. (UC, 2024a, p. 45)

#### **Stationary Sources**

The proposed Project was conservatively assumed to include installation of one (1), 300-horsepower diesel-powered fire pump operating for up to 1 hour per day, 1 day per week for up to 50 hours per year for maintenance and testing purposes. Emissions associated with the stationary diesel-powered emergency fire pumps were calculated using CalEEMod. (UC, 2024a, p. 45)

### **3. Localized Significance**

#### ***Background on LST Development***

The analysis in the Project's AQIA makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). (UC, 2024a, p. 47)



The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-49. LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. (UC, 2024a, p. 48)

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the LST Methodology. (UC, 2024a, p. 48)

### ***Applicability of LSTs for the Project***

For the proposed Project, the appropriate SRA for the LST analysis is the SCAQMD Central San Bernardino 2 (SRA 34). LSTs apply to CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size. In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken: (UC, 2024a, p. 48)

- Identify the maximum daily on-site emissions that would occur during construction activity:
  - The maximum daily on-site emissions could be based on information provided by the Project Applicant; or
  - The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds and CalEEMod User's Guide Appendix A: Calculation Details for CalEEMod can be used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in lbs/day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than 5 acres per day, then LST impacts may still be conservatively evaluated using the LST look-up tables for a 5-acre disturbance area. Use of the 5-acre disturbance area thresholds can be used to show that even if the daily emissions from all construction activity were emitted within a 5-acre area, and therefore concentrated over a smaller area which would result in greater site adjacent concentrations, the impacts would still be less than significant if the applicable 5-acre thresholds are utilized.
- The LST Methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.



### **Emissions Considered**

Based on SCAQMD's LST Methodology, emissions for concern during construction activities are on-site NO<sub>x</sub>, CO, PM<sub>2.5</sub>, and PM<sub>10</sub>. The LST Methodology clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." As such, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. (UC, 2024a, p. 49)

### **Maximum Daily Disturbed Acreage**

The "acres disturbed" for analytical purposes are based on specific equipment type for each subcategory of construction activity and the estimated maximum area a given piece of equipment can pass over in an 8-hour workday. The equipment-specific grading rates are summarized in the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod*. The disturbed area per day is representative of a piece of equipment making multiple passes over the same land area. In other words, one Rubber Tired Dozer can make multiple passes over the same land area totaling 0.5 acres in a given 8-hour day. As shown in Table 3-11 of the Project's AQIA (EIR *Technical Appendix CI*), the Project's construction activities could actively disturb approximately 3.5 acre per day during site preparation and 6 acres per day during grading activities. (UC, 2024a, p. 49)

### **Receptors**

As previously stated, LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities. (UC, 2024a, p. 49)

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, and individuals with pre-existing respiratory or cardiovascular illness. Structures that house these persons or places where they gather are defined as "sensitive receptors." These structures typically include uses such as residences, hotels, and hospitals where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project Site has been used to determine construction and operational air quality impacts for emissions of PM<sub>10</sub> and PM<sub>2.5</sub>, since PM<sub>10</sub> and PM<sub>2.5</sub> thresholds are based on a 24-hour averaging time. (UC, 2024a, p. 50)

LSTs apply, even for non-sensitive land uses, consistent with LST Methodology and SCAQMD guidance. Per the LST Methodology, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain on-site for a full 24 hours but are typically on-site for 8 hours or less. However, LST Methodology explicitly states that "LSTs based on shorter averaging periods, such as the NO<sub>2</sub> and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours." Therefore, any adjacent land use where an individual could remain for 1 or 8-hours, that is located at



a closer distance to the Project Site than the receptor used for PM<sub>10</sub> and PM<sub>2.5</sub> analysis, must be considered to determine construction and operational LST air impacts for emissions of NO<sub>2</sub> and CO since these pollutants have an averaging time of 1 and 8-hours. (UC, 2024a, p. 50)

### ***Project-Related Receptors***

Refer above to subsection 4.1.1.F and Figure 4.1-10 (previously presented) for a description and depiction of the sensitive receptors in the area surrounding the Project Site and that were considered as part of the LST analysis. The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project Site has been used to determine localized construction and operational air quality impacts for emissions of PM<sub>10</sub> and PM<sub>2.5</sub> (since PM<sub>10</sub> and PM<sub>2.5</sub> thresholds are based on a 24-hour averaging time). The nearest receptors used for evaluation of localized impacts of PM<sub>10</sub> and PM<sub>2.5</sub> are the existing residences at 7926 Sterling Avenue, represented by R1, approximately 123 feet (37 meters) west of the Project Site. As such a 37-meter receptor distance will be used for evaluation of localized PM<sub>10</sub> and PM<sub>2.5</sub>. As previously stated, and consistent with LST Methodology, the nearest commercial/industrial use to the Project Site is used to determine construction and operational LST air impacts for emissions of NO<sub>x</sub> and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. The nearest receptors used for evaluation of localized NO<sub>x</sub> and CO is R6, represented by Amanda Towing at 2285 6th Street, located immediately adjacent (less than 25 meters) to the eastern portion of the site boundary. It should be noted that the LST Methodology explicitly states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." As such a 25-meter receptor distance will be used for evaluation of NO<sub>x</sub> and CO. (UC, 2024a, p. 51)

## **4. Methodology for Evaluating Diesel Particulate Matter-Related Health Risks**

The Project's HRA (*Technical Appendix C2*) was prepared based on SCAQMD guidelines to produce conservative estimates of risk posed by Project-related DPM emissions.

### ***Exposure Quantification***

The Environmental Protection Agency's (U.S. EPA's) AERMOD model has been utilized. For purposes of this analysis, the Lakes AERMOD View (Version 11.2.0) was used to calculate annual average particulate concentrations associated with site operations. Lakes AERMOD View was utilized to incorporate the U.S. EPA's latest AERMOD Version 22112. (UC, 2024b, p. 22)

The model offers additional flexibility by allowing the user to assign an initial release height and vertical dispersion parameters for mobile sources representative of a roadway. For the Project's HRA, the roadways were modeled as adjacent volume sources. Roadways were modeled using the U.S. EPA's haul route methodology for modeling of on-site and off-site truck movement. More specifically, the Haul Road Volume Source Calculator in Lakes AERMOD View has been utilized to determine the release height parameters. Based on the US EPA methodology, the Project's modeled sources would result in a release height of 3.49



meters and an initial lateral dimension of 4.0 meters, and an initial vertical dimension of 3.25 meters. (UC, 2024b, p. 22)

Model parameters are presented in Table 2-5 of the Project's HRA (*EIR Technical Appendix C2*). The model requires additional input parameters including emission data and local meteorology. Meteorological data from the SCAQMD's Redlands monitoring station was used to represent local weather conditions and prevailing winds. (UC, 2024b, p. 22)

Universal Transverse Mercator (UTM) coordinates for World Geodetic System (WGS) 84 were used to locate the Project Site boundaries, each volume source location, and receptor locations in the Project vicinity. The AERMOD dispersion model summary output files for the Project are presented in Appendix 2.3 to the Project's HRA (*EIR Technical Appendix C2*). Modeled sensitive receptors were placed at residential and nonresidential locations. (UC, 2024b, p. 22)

Receptors may be placed at applicable structure locations for residential and worker property and not necessarily the boundaries of the properties containing these uses because the human receptors (residents and workers) spend a majority of their time at the residence or in the workplace's building, and not on the property line. It should be noted that the primary purpose of receptor placement is focused on long-term exposure. For example, the Project's HRA evaluates the potential health risks to residents, workers, and school children over a period of 30, 25, or 9 years of exposure, respectively. Notwithstanding, as a conservative measure, receptors were placed at either the outdoor living area or the building façade, whichever is closer to the Project Site. (UC, 2024b, p. 22)

Discrete receptors were placed in all directions nearest to the Project Site and Project truck routes in order to account for the predominant wind directions in the Project vicinity (UC, 2024b, p. 23).

For purposes of the Project's HRA, receptors include both residential and non-residential (school children and worker) land uses in the vicinity of the Project. These receptors are included in the Project's HRA since residents, workers, and school children may be exposed at these locations over a long-term duration of 30, 25, and 9 years, respectively. This methodology is consistent with SCAQMD and OEHHA recommended guidance. (UC, 2024b, p. 23)

Any impacts to residents or workers located further away from the Project Site than the modeled residential and workers in a given direction would have a lesser impact than what has already been disclosed herein at the Maximally Exposed Individual Receptor (MEIR), Maximally Exposed Individual School Child (MEISC), and Maximally Exposed Individual Worker (MEIW) because concentrations dissipate with distance. (UC, 2024b, p. 23)

All receptors were set to existing elevation height so that only ground-level concentrations are analyzed. United States Geological Survey (USGS) Digital Elevation Model (DEM) terrain data based on a 7.5-minute topographic quadrangle map series using AERMAP was utilized in the Project's HRA modeling to set elevations. (UC, 2024b, p. 23)



Discrete variants for daily breathing rates, exposure frequency, fraction of time at home, and exposure duration were obtained from relevant distribution profiles presented in the 2015 OEHHA Guidelines. Tables 2-6 through 2-9 of the Project's HRA (EIR *Technical Appendix C2*) summarize the Exposure Parameters for residents and workers based on 2015 OEHHA Guidelines. Appendix 2.4 to the Project's HRA includes the detailed risk calculation. (UC, 2024b, p. 23)

### ***Carcinogenic Chemical Risk***

Excess cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. (UC, 2024b, p. 24)

Guidance from CARB and the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) recommends a refinement to the standard point estimate approach when alternate human body weights and breathing rates are utilized to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose. Once determined, contaminant dose is multiplied by the cancer potency factor (CPF) in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day)<sup>-1</sup> to derive the cancer risk estimate. Therefore, to assess exposures, a dose algorithm was utilized as described in Subsection 2.5 of the Project's HRA (EIR *Technical Appendix C2*). (UC, 2024b, p. 24)

### ***Non-Carcinogenic Exposures***

An evaluation of the potential noncarcinogenic effects of chronic exposures was also conducted. Adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). The REL for diesel particulates was obtained from OEHHA for this analysis. The chronic reference exposure level (REL) for DPM was established by OEHHA as 5 µg/m<sup>3</sup>. Non-cancer health effects are expressed as a hazard index (HI), which is calculated using the equation provided in Subsection 2.6 of the Project's HRA (EIR *Technical Appendix C2*). (UC, 2024b, p. 25)

#### **4.1.5 IMPACT ANALYSIS**

***Threshold a.: Would the Project conflict with or obstruct implementation of the applicable air quality plan?***

Currently, the State and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. (UC, 2024a, p. 59)



In December 2022, the SCAQMD released the Final 2022 AQMP (2022 AQMP). The 2022 AQMP continues to evaluate current integrated strategies and control measures to meet the CAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2016 AQMP, the 2022 AQMP incorporates scientific and technological information and planning assumptions, including the 2020-2045 RTP/SCS, a planning document that supports the integration of land use and transportation to help the region meet the federal CAA requirements.<sup>6</sup> The Project's consistency with the AQMP will be determined using the 2022 AQMP as discussed below. (UC, 2024a, p. 59)

The criteria for determining consistency with the 2022 AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the 1993 CEQA Handbook and are analyzed below.

- *Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.*

Consistency Criterion No. 1 refers to violations of the NAAQS and CAAQS. Violations of the NAAQS and/or CAAQS would occur if the emissions resulting from the Project were to exceed the SCAQMD's localized or regional significance thresholds (UC, 2024a, p. 59).

#### **Construction Impacts – Consistency Criterion No. 1**

As indicated under the discussion and analysis of Thresholds b. and c., while the Project's construction activities would not exceed any of the SCAQMD LSTs, prior to mitigation Project construction activities would exceed the SCAQMD Regional Threshold for VOC. As such, prior to mitigation Project construction-source VOC emissions exceedances would therefore increase the frequency or severity of existing air quality violations and would cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP. (UC, 2024a, p. 59)

#### **Operational Impacts – Consistency Criterion No. 1**

As indicated under the discussion and analysis of Thresholds b. and c., the operational emissions associated with the Project would not exceed the applicable Regional Thresholds or LST thresholds for operational activity. Therefore, the Project would not conflict with the AQMP according to this criterion. (UC, 2024a, p. 59)

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<sup>6</sup> It is acknowledged that SCAG adopted the 2024-2050 RTP/SCS in April 2024. However, the 2022 AQMP is reliant upon the 2020-2045 RTP/SCS. The Project Site was designated "Industrial Light (IL)" by the City of San Bernardino General Plan as considered by both the 2020-2045 RTP/SCS and the 2024-2050 RTP/SCS. As such, the Project Site's land use assumption was the same under both versions of the RTP/SCS.



### **Conclusion – Consistency Criterion No. 1**

On the basis of the preceding discussion, the Project is determined to be inconsistent with the first criterion. This is evaluated as a significant impact for which mitigation would be required (UC, 2024a, p. 59).

### **Construction Impacts – Consistency Criterion No. 2**

*Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP based on the years of project buildout phase.*

The 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of San Bernardino General Plan is considered to be consistent with the AQMP. (UC, 2024a, p. 60)

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the Project Site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. Notwithstanding, prior to mitigation the Project has the potential to exceed the SCAQMD Regional Threshold for VOC during construction activities. Therefore, prior to mitigation the Project would result in a significant impact due to a conflict with Consistency Criterion No. 2. (UC, 2024a, p. 60)

### **Operational Impacts – Consistency Criterion No. 2**

The City of San Bernardino General Plan designates the Project Site for “Industrial Light (IL)” uses. The IL land use designation allows for a variety of industrial uses, including warehousing/distribution, assembly, light manufacturing, research and development, mini storage, and repair facilities conducted within enclosed structures as well as supporting retail and personal uses with a maximum FAR of 0.75. The Project includes the future development of a single 557,000 s.f. high-cube transload warehouse building, which is fully consistent with the proposed uses allowed under the IL land use designation. Therefore, the Project does not propose or require amendment of the site's underlying land use designation or zoning classification. As such, the Project's long-term operations would be consistent with the assumptions used by the 2022 AQMP. (UC, 2024a, p. 60)

### **Conclusion – Consistency Criterion No. 2**

On the basis of the preceding discussion, the Project is determined to be inconsistent with the second criterion due to construction-related emissions that would exceed the SCAQMD Regional Threshold for VOC. This is considered a significant impact for which mitigation would be required. (UC, 2024a, p. 60)



### AQMP Consistency Conclusion

As indicated in the preceding analysis, although long-term operation of the Project would not result in or cause NAAQS or CAAQS violations, prior to mitigation Project-related construction activities would result in NAAQS and CAAQS violations due to regional emissions of VOC. As such, prior to mitigation, the Project would be inconsistent with the AQMP, resulting in a potentially significant impact. (UC, 2024a, p. 60)

***Threshold b.: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

#### A. Construction Emissions Impact Analysis

The estimated maximum daily construction emissions are summarized in Table 4.1-11, *Overall Construction Emissions Summary – Without Mitigation*. Detailed air model outputs are presented in Appendix 3.1 of the Project’s AQIA (*Technical Appendix C1*). As shown in Table 4.1-11, peak Project construction emissions of NO<sub>x</sub>, CO, SO<sub>x</sub>, and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) would not exceed the applicable SCAQMD Regional Thresholds. However, peak Project construction VOC emissions would exceed the SCAQMD Regional Threshold for this pollutant. Accordingly, the Project’s daily VOC emissions during construction would violate the SCAQMD Regional Threshold for this pollutant and would result in a cumulatively-considerable net increase of a criteria pollutant (i.e., ozone) for which the Project region is in nonattainment. This represents a significant impact for which mitigation would be required. (UC, 2024a, p. 41)

**Table 4.1-11 Overall Construction Emissions Summary – Without Mitigation**

Year	Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Summer</b>						
2024	6.10	58.27	48.79	0.11	8.18	4.82
2025	2.36	15.05	33.83	0.04	4.24	1.37
2026	82.38	22.69	48.22	0.06	5.34	1.83
<b>Winter</b>						
2024	2.51	16.47	30.73	0.04	4.31	1.43
2025	2.29	15.28	29.35	0.04	4.24	1.37
2026	2.14	14.39	28.21	0.04	4.18	1.32
<b>Maximum Daily Emissions</b>	<b>82.38</b>	<b>58.27</b>	<b>48.79</b>	<b>0.11</b>	<b>8.18</b>	<b>4.82</b>
SCAQMD Regional Threshold	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

(UC, 2024a, Table 3-5)



**B. Operational Emissions Impact Analysis**

CaleEMod utilizes summer and winter EMFAC2021 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. The Project's estimated peak operational emissions are presented in Table 4.1-12, *Summary of Peak Operational Emissions – Without Mitigation*. Detailed air model outputs are presented in Appendices of 3.1 of *Technical Appendix C1*. As shown in Table 4.1-12, under the assumed scenarios, Project operational emissions would not exceed any of the applicable SCAQMD Regional Thresholds. The analysis assumes that the Project would comply with SCAQMD Rule 403, requiring dust control measures during construction as provided in CRDR 4.1-1, and SCAQMD rules for construction activities on the Project Site as provided in CRDR 4.1-5. Accordingly, the Project would not emit substantial concentrations of these pollutants and would not contribute to an existing or projected air quality violation on a direct or cumulatively-considerable basis. Impacts associated with Project operational emissions of VOCs, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> would be less than significant and mitigation is not required. (UC, 2024a, p. 45)

**Table 4.1-12 Summary of Peak Operational Emissions – Without Mitigation**

Source	Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Summer</b>						
Mobile Source	2.47	11.99	25.60	0.14	7.38	2.04
Area Source	16.69	0.20	24.22	0.00	0.04	0.03
Stationary Source	0.62	5.00	4.78	0.02	0.20	0.18
On-Site Cargo Handling Equipment	0.98	2.75	2.51	0.00	0.14	0.14
<b>Project Maximum Daily Emissions</b>	<b>20.76</b>	<b>19.94</b>	<b>57.11</b>	<b>0.16</b>	<b>7.76</b>	<b>2.40</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Winter</b>						
Mobile Source	2.34	12.58	22.54	0.13	7.38	2.04
Area Source	12.71	0.00	0.00	0.00	0.00	0.00
Stationary Source	0.62	5.00	4.78	0.02	0.20	0.18
On-Site Cargo Handling Equipment	0.98	2.75	2.51	0.00	0.14	0.14
<b>Project Maximum Daily Emissions</b>	<b>16.65</b>	<b>20.33</b>	<b>29.82</b>	<b>0.16</b>	<b>7.72</b>	<b>2.36</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

(UC, 2024a, Table 3-9)

**Threshold c.: Would the Project expose sensitive receptors to substantial pollutant concentrations?**

During construction and operational activities, the Project has the potential to expose nearby sensitive receptors to substantial pollutant concentrations. The following provides an analysis based on the applicable LSTs established by the State of California and SCAQMD, an analysis of the Project's potential to result in or



contribute to CO “hot spots,” and an analysis of the Project’s potential to result in cancer risks and non-cancer health hazards.

**A. Localized Criteria Pollutant Analysis**

**1. Construction Analysis**

The total acreage disturbed is less than 5 acres per day for site preparation; however, more than 5 acres per day would be disturbed during grading activities. The LST Methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the Project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site construction activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the Project Site boundary. As such, LSTs for a 5-acre site during grading activities are used as a screening tool to determine if further detailed analysis is required. The thresholds used for the construction-source LST analysis previously were presented in Table 4.1-5. (UC, 2024a, p. 53)

Table 4.1-13, *Localized Construction-Source Emissions – Without Mitigation*, identifies the localized impacts at the nearest receptor location in the vicinity of the Project. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. As shown, under the assumed scenarios, emissions resulting from the Project construction LSTs would not exceed applicable SCAQMD LSTs for NO<sub>x</sub>, CO, or particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Accordingly, Project construction activities would not expose any sensitive receptors in the vicinity of the Project Site to substantial criteria pollutant concentrations. Impacts would be less than significant and no mitigation would be required.

**Table 4.1-13 Localized Construction-Source Emissions – Without Mitigation**

Construction Activity	Year	Emissions (lbs/day)			
		NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Site Preparation	Maximum Daily Emissions	42.51	35.31	7.91	4.76
	SCAQMD Localized Threshold	220	1,366	22	7
	Threshold Exceeded?	NO	NO	NO	NO
Grading	Maximum Daily Emissions	57.86	46.52	5.78	3.39
	SCAQMD Localized Threshold	270	1,754	29	9
	Threshold Exceeded?	NO	NO	NO	NO

(UC, 2024a, Table 3-13)



## 2. Operational Analysis

The Project is located on an approximately 25.12-acre parcel; however, the LST Methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine whether pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the Project would occur within a concentrated 5-acre area. This screening method would therefore overpredict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the Project Site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required. Maximum daily localized operational emissions LSTs previously were identified in Table 4.1-6. (UC, 2024a, p. 55)

The LST analysis generally includes on-site sources (area, energy, mobile, on-site cargo handling equipment, and stationary equipment, as previously described in subsection 4.1.4.B). However, it should be noted that the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. As such, in an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 4.1-14, *Localized Significance Summary of Operations– Without Mitigation*, represent all on-site Project-related stationary (area) sources and Project-related mobile sources. It should be noted that the longest on-site distance is roughly 0.39 mile for both trucks and passenger cars. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs, as shown in Table 4.1-14. The analysis assumes that the Project would comply with SCAQMD Rule 1301, regarding stationary source equipment as provided in CRDR 4.1-2. Accordingly, because the Project would not exceed the applicable SCAQMD thresholds for localized NO<sub>x</sub>, CO, or particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions, Project operations would not expose any sensitive receptors in the vicinity of the Project Site to substantial pollutant concentrations. Impacts would be less than significant and no mitigation is required.

**Table 4.1-14 Localized Significance Summary of Operations– Without Mitigation**

Scenario	Emissions (lbs/day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Daily Emissions	9.67	37.04	0.61	0.42
SCAQMD Localized Threshold	270	1,754	7	2
Threshold Exceeded?	NO	NO	NO	NO

(UC, 2024a, Table 3-16)



## **B. CO Hot Spot Impact Analysis**

A CO “hot spot” is an isolated geographic area where localized concentrations of CO exceeds the CAAQS one-hour (20 parts per million) or eight-hour (9 parts per million) standards (UC, 2024a, p. 56).

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment. (UC, 2024a, p. 56)

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods<sup>10</sup>. This “hot spot” analysis did not predict any exceedance of the 1-hour (20.0 ppm) or 8-hour (9.0 ppm) CO standards, as shown on Table 3-18 of the Project’s AQIA (EIR *Technical Appendix C1*). (UC, 2024a, pp. 56-57)

Based on the SCAQMD’s 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, of the 8.4 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (i.e., the highest CO generating intersection within the “hot spot” analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared. In contrast, an adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. (UC, 2024a, p. 57)

The ambient 1-hour and 8-hour CO concentration within the Project study area is estimated to be 2.0 ppm and 1.6 ppm, respectively (data from Central San Bernardino Valley 2 station for 2021). Therefore, even if the traffic volumes for the proposed Project were ten times the traffic volumes generated at the Long Beach Blvd. and Imperial Highway intersection, due to the on-going improvements in ambient air quality and vehicular emissions controls, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections. As noted above, only 0.7 ppm were attributable to the traffic volumes and congestion at one of the busiest intersections in the SCAB. Therefore if these traffic volumes were multiplied by ten times, it could be expected that the CO attributable to traffic would increase tenfold as well, resulting in 7 ppm – even if this were added to either the 1-hour or 8-hour CO concentrations within the Project study area, this would result in 9.0 ppm and 8.6 ppm for the 1-hr and 8-hr timeframes, respectively, neither of which would exceed the applicable 1-hour standard of 20 ppm or the 8-hr standard of 9 ppm. (UC, 2024a, p. 57)

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under



existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (vph) – or 24,000 vph where vertical and/or horizontal air does not mix – in order to generate a significant CO impact. Traffic volumes generating the CO concentrations for the “hot spot” analysis is shown on Table 3-19 of the Project’s AQIA (EIR *Technical Appendix C1*). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which had AM/PM traffic volumes of 8,062 vph and 7,719 vph respectively. (UC, 2024a, pp. 57-58)

As summarized on Table 4.1-15, *Peak Hour Traffic Volumes*, the intersection of I-210 Northbound Ramps and 5<sup>th</sup> Street would have the highest AM and PM traffic volumes of 3,096 vph and 3,417 vph, respectively. As such, total traffic volumes at the intersections considered are less than the traffic volumes identified in the 2003 AQMP. As such, the Project considered herein along with background and cumulative development would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO “hot spots” are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant. (UC, 2024a, p. 59)

**Table 4.1-15 Peak Hour Traffic Volumes**

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Palm Av. & 5th St.	413/898	648/540	398/755	1,081/757	2,540/2,949
Church Av. & 5th St.	11/40	180/120	571/1,029	1,137/829	1,899/2,018
I-210 SB Ramps & 5th St.	0/0	673/769	681/1,092	1,564/1,012	2,918/2,873
I-210 NB Ramps & 5th St.	789/824	0/0	694/1,336	1,613/1,257	3,096/3,417

(UC, 2024a, Table 3-20)

### **C. Toxic Air Contaminant Emissions Impact Analysis**

A Project-specific Health Risk Assessment (HRA) was prepared for the Project and is included as EIR *Technical Appendix C2*. Refer to Section 2 of the Project’s HRA for a detailed discussion of the recommended methodology, emissions estimation, exposure quantification, carcinogenic chemical risk, and non-carcinogenic exposure used as inputs to the analysis. Nearby sensitive receptors evaluated as part of the HRA are described above in subsection 4.1.1.F and are depicted on Figure 4.1-10. Provided below is a summary of the results of the HRA for the Maximally Exposed Individual Receptor (MEIR) and Maximally Exposed Individual Worker (MEIW), and Maximally Exposed Individual School Child (MEISC).

#### **1. Construction Health Risk Assessment**

As part of Project construction, diesel-fueled equipment would operate on the site. Also, diesel-fueled trucks would travel to/from the Project Site to make deliveries of construction materials and equipment and to haul debris from the Site. Diesel-fueled trucks produce DPM emissions, which is a toxic air contaminant and is



known to be associated with acute and chronic health hazards – including cancer. The receptor location with the greatest potential exposure to Project construction-related DPM emissions is an existing residence located at 7926 Sterling Avenue approximately 123 feet west of the Project Site. At this receiver location, the maximum incremental cancer risk attributable to the Project is 3.99 in one million, which would not exceed the SCAQMD cancer risk significance threshold of 10 in one million. At this same location, the non-cancer risk health index would be  $<0.01$ , which would not exceed the SCAQMD non-cancer health risk significance threshold of 1.0. Therefore, Project construction activities would not directly cause or contribute in a cumulatively-considerable manner to the exposure of receptors near the Project Site to substantial DPM emissions. Impacts would be less than significant. (UC, 2024b, p. 26)

## **2. Operational Health Risk Assessment**

### ***Maximally Exposed Individual Receptor (MEIR)***

At the maximally exposed individual receptor (MEIR), which is a residence located at 7926 Sterling Avenue approximately 123 feet west of the Project Site, the maximum incremental cancer risk attributable to Project-related operational DPM emissions is calculated to be 2.96 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million. At this same location, the non-cancer health risk index is estimated to be  $<0.01$ , which would not exceed the SCAQMD non-cancer health risk index threshold of 1.0. All other residential locations in the general vicinity of the Project Site would be exposed to lower concentrations of Project-related DPM emissions than the MEIR due to their increased distance from Project-related truck activity and, therefore, would be exposed to lesser risk than the MEIR identified above. Therefore, the Project would not directly cause or contribute in a cumulatively-considerable manner to the exposure of residential receptors near the Project Site to substantial DPM emissions. Impacts to residential receptors would be less than significant. (UC, 2024b, pp. 26-27)

### ***Maximally Exposed Individual Worker (MEIW)***

At the maximally exposed individual worker (MEIW), located approximately 170 feet south of the Project Site, the maximum incremental cancer risk attributable to the DPM emissions from trucks traveling to/from the Project Site is calculated to be 0.75 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million. The non-cancer health risk index at the MEIW is estimated to be  $<0.01$ , which would not exceed the SCAQMD non-cancer health risk index threshold of 1.0. All other places of business in the general vicinity of the Project Site would be exposed to lower concentrations of Project-related DPM emissions than the MEIW due to their increased distance from Project-related truck activity and, therefore, would be exposed to lesser risk than the MEIW identified above. Therefore, impacts to worker receptors would be less than significant. (UC, 2024b, p. 27)

### ***Maximally Exposed Individual School Child (MEISC)***

The nearest school to the Project Site is the Indian Springs High School located approximately 2,731 feet west of the Project Site. The maximally exposed individual school child (MEISC) incremental cancer risk attributable to the DPM emissions from trucks traveling to/from the Project Site is calculated to be 0.04 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million. The non-cancer health risk index at the MEIW is estimated to be  $<0.01$ , which would not exceed the SCAQMD non-cancer



health risk index threshold of 1.0. All other school children in the general vicinity of the Project Site would be exposed to lower concentrations of Project-related DPM emissions than the MEISC due to their increased distance from Project-related truck activity and, therefore, would be exposed to lesser risk than the MEISC identified above. Impacts to school child receptors would be less than significant. (UC, 2024b, p. 3)

### **3. Combined Construction and Operational Analysis**

This analysis considers a conservative scenario in which a child at a nearby residence is exposed to Project construction-related DPM emissions from birth for the expected 1.93 years of Project construction, and is then exposed to Project operational emissions for the remaining 28.07 years of the 30-year residential exposure scenario. It should be noted that in many cases the combined construction and operational risk is less than the operational risk alone due to varying DPM concentrations at receptors for the construction and operational phases of the Project, as well as the assumed exposure durations and scenarios, which place a greater emphasis on pollutant exposures that occur early in life. (UC, 2024a, p. 28)

The land use with the greatest potential exposure to Project construction-source and operational-source DPM emissions is Location R1. At the MEIR, the maximum incremental cancer risk attributable to Project construction-source and operational-source DPM emissions is estimated at 5.55 in one million, which is less than the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be  $\leq 0.01$ , which would not exceed the applicable threshold of 1.0. As such, the Project would not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity. All other receptors during construction and operational activity would experience less risk than what is identified for this location. Accordingly, health risk impacts associated with combined Project construction and operational emissions would be less than significant. (UC, 2024a, p. 28)

### **4. Community Health**

Most local agencies, including the City of San Bernardino, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or “generic” data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Project’s air emissions without undue speculation. Instead, readers are directed to the Project’s air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Project’s construction and long-term operation. (UC, 2024a, p. 61)

Notwithstanding, the Project’s AQIA does evaluate the proposed Project’s localized impact to air quality for emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> by comparing the proposed Project’s on-site emissions to the SCAQMD’s applicable LST thresholds. The LST analysis above determined that the Project would not result in emissions exceeding SCAQMD’s LSTs. Therefore, the proposed Project would not be expected to exceed



the most stringent applicable federal or State ambient air quality standards for emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. (UC, 2024a, p. 61)

As the Project would comply with federal, State, and local air quality standards, the proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled. (UC, 2024a, pp. 61-62)

#### 4.1.6 CUMULATIVE IMPACTS

The cumulative study area for air quality includes the City of San Bernardino and the SCAB. The SCAB is designated as a nonattainment area for State standards of O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The region is also designated as a nonattainment area for federal standards of O<sub>3</sub> and PM<sub>2.5</sub>. Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SCAB and associated growth and development anticipated in the air basin.

The AQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. In this report the AQMD clearly states (Page D-3): (UC, 2024a, pp. 62-63)

*"...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is  $HI > 1.0$  while the cumulative (facility-wide) is  $HI > 3.0$ . It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*

*Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts also would not cause a cumulatively-considerable increase in emissions for those pollutants for which the SCAB is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. SCAQMD's thresholds of significance for project-specific direct and cumulatively-considerable impacts have clearly been



successful, as application of these thresholds has led to significant air quality improvements throughout the SCAB, as demonstrated by the detailed discussion presented in subsection 4.1.1.E.4 (above). (UC, 2024a, p. 63)

**A. AQMP Consistency (Threshold a.)**

As discussed under the analysis of Threshold a., although Project operational emissions would not conflict with the SCAQMD AQMP, and although the Project's construction-related air quality emissions would be below the SCAQMD LSTs, construction activities associated with the proposed Project would exceed applicable Regional Threshold for emissions of VOC. Although the Project's proposed land uses would be consistent with the land use assumptions used in the AQMP, due to construction-related emissions of VOC that would exceed the SCAQMD Regional Threshold for this pollutant, prior to mitigation, the Project would result in a conflict with the SCAQMD 2022 AQMP. As other cumulative developments also have the potential to result in conflicts with the SCAQMD 2022 AQMP, Project impacts due to a conflict with the SCAQMD 2022 AQMP would be cumulatively considerable.

**B. Regional Criteria Pollutant Emissions (Threshold b.)**

As indicated under the analysis of Threshold b., although the Project's operational-related regional emissions would not exceed the SCAQMD Regional Thresholds, construction activities associated with the Project would exceed the SCAQMD construction-related Regional Threshold for VOC. As previously indicated in Table 4.1-2, the SCAB is designated as nonattainment for O<sub>3</sub>, and VOC is a precursor to ozone formation. Thus, the Project's emissions of VOC during construction activities would cumulatively contribute to a net increase of a criteria pollutant (O<sub>3</sub>) for which the SCAB is considered nonattainment. Accordingly, and pursuant to SCAQMD's thresholds of significance that indicate that direct impacts also should be considered to be cumulatively considerable, the Project's impacts due to construction-related emissions of VOC would be cumulatively considerable.

**C. Localized Air Quality Impacts (Threshold c.)**

**1. LST Analysis**

As indicated under the analysis of Threshold c., and as shown in Table 4.1-13 and Table 4.1-14, construction and long-term operation of the proposed Project would not exceed any of the SCAQMD LSTs. Accordingly, and based on SCAQMD guidance, the Project's construction and long-term operational localized air quality impacts would be less than significant on a cumulatively-considerable basis.

**2. CO "Hot Spots"**

As indicated in the analysis of Threshold c., the Project and other cumulative developments would not generate the level of traffic volumes necessary to produce a CO "hot spot." As shown in Table 4.1-15, the intersection of P I-210 Northbound Ramps and 5<sup>th</sup> Street would have the highest AM and PM traffic volumes of 3,096 vph and 3,417 vph, respectively, which is far below the traffic volumes identified in the 2003 AQMP. Accordingly, the Project when considered in conjunction with background and cumulative development would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot



spot study or based on representative BAAQMD CO threshold considerations. Localized air quality impacts due to CO “hot spots” would therefore be less than significant on a cumulatively-considerable basis.

### 3. *Cumulatively-Considerable DPM-Source TAC Impacts*

As indicated under the analysis of Threshold c., and as previously shown in Table 4.1-13 and Table 4.1-14, construction and operational activities associated with the Project would not exceed any of the SCAQMD LSTs. The analysis also demonstrates that the proposed Project would not result in or contribute to any CO “hot spots.” Additionally, construction and operational activities associated with the Project would not expose any nearby sensitive receptors to cancer risks exceeding 10 in one million or non-cancer risks exceeding the applicable threshold of 1.0, even when considering the Project’s combined construction and operational emissions. SCAQMD treats direct and cumulative impacts the same in terms of thresholds. Therefore, the Project would result in less-than-significant cumulatively-considerable impacts due to the exposure of sensitive receptors within one mile of the Project Site to substantial pollutant concentrations.

#### 4.1.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project’s proposed land uses would be consistent with the land use assumptions used in the AQMP, and Project operational emissions would not conflict with the SCAQMD AQMP. However, although the Project’s construction-related air quality emissions would be below the SCAQMD LSTs, construction activities associated with the proposed Project would exceed applicable Regional Threshold for emissions of VOC prior to mitigation. As such, prior to mitigation, the Project would be inconsistent with the SCAQMD 2022 AQMP, resulting in a potentially significant impact.

Threshold b: Significant Direct and Cumulatively-Considerable Impact. Emissions associated with long-term operation of the Project would not exceed any of the SCAQMD Regional Thresholds of significance. However, construction activities associated with the Project would exceed the SCAQMD Regional Threshold for VOC. Thus, prior to mitigation, the Project’s construction activities would result in a cumulatively-considerable net increase of criteria pollutants (i.e., VOC) for which the project region is non-attainment (i.e., ozone) under an applicable federal or State ambient air quality standard. Impacts would be significant on both a direct and cumulatively-considerable basis.

Threshold c: Less-than-Significant Impact. As indicated in Table 4.1-13 and Table 4.1-14, Project-related construction and long-term operational emissions would not exceed the SCAQMD LSTs for any criteria pollutant. Additionally, the Project considered herein would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. In addition, based on the Project-specific HRA (*Technical Appendix C2*), the Project would not expose the MEIR, MEIW, or MEISC to cancer risks exceeding the SCAQMD significance threshold of 10 in one million or non-cancer health risks exceeding the applicable significance threshold of 1.0. Even when combining the Project’s construction and operational-related emissions, the Project would not expose the MEIR to cancer or non-cancer related health risks exceeding 10 in one million or 1.0, respectively. SCAQMD treats direct and cumulative impacts the same in terms of thresholds. Therefore,



the Project would not expose sensitive receptors, which are located within one (1) mile of the Project Site, to substantial pollutant concentrations, and impacts would be less than significant.

#### 4.1.8 MITIGATION

##### ***Applicable City Regulations and Design Requirements***

The following are City Regulations and Design Requirements (CRDRs) that are applicable to the Project. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

- CRDR 4.1-1 The Project is required to comply with the provisions of SCAQMD Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by County of Riverside staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.
- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour (mph) per SCAQMD guidelines in order to limit fugitive dust emissions.
  - The contractor shall ensure that all disturbed unpaved roads and disturbed areas upon which construction equipment will operate are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.
  - The contractor shall ensure that traffic speeds on unpaved roads and Project Site areas are reduced to 15 mph or less.
- CRDR 4.1-2 The Project is required to comply with the provisions of SCAQMD Rule 1301 regarding stationary source equipment. The specific air quality goal is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. Rule 1301 limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).
- CRDR 4.1-3 The Project is required to comply with SCAQMD Rule 2305, Warehouse Indirect Source Rule, that requires owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NOX) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The rule imposes a "Warehouse Points Compliance Obligation" (WPCO) on warehouse operators. Operators satisfy the WPCO by accumulating "Warehouse Actions and Investments to Reduce Emissions Points" (WAIRE Points) in a given 12-month period.



WAIRE Points are awarded by implementing measures to reduce emissions listed on the WAIRE Menu, or by implementing a custom WAIRE Plan approved by the SCAQMD.

- CRDR 4.1-4 The Project would be required to comply with SCAQMD Rule 1401 by requiring that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States (U.S.) Bureau of Mines.
- CRDR 4.1-5 The Project is required to comply with applicable SCAQMD rules for construction activities on the Project Site. In addition to the SCAQMD requirements listed above, additional SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 431.2 (Low Sulfur Fuel); and Rule 1186 / 1186.1 (Street Sweepers).
- CRDR 4.1-6 The Project is required to comply with the provisions of SCAQMD Rule 402, “Nuisance,” which requires that a person shall not discharge air contaminants or other materials that would cause health or safety hazards to any considerable number of persons or the public.

### ***Mitigation***

The following mitigation measures would reduce the Project’s construction-related VOC emissions and the contributions of this pollutant to the SCAB’s non-attainment status for ozone:

- MM 4.1-1 All offroad equipment required for Project-related construction activities shall meet CARB Tier 4 interim emission standards or better, which shall be a requirement of grading and building permits. The Project applicant shall ensure that the grading and building plans include a note specifying this requirement and that all Project contractors comply with the requirement through periodic inspection of the construction site by City of San Bernardino staff or its designee to confirm compliance. The Project applicant shall include this requirement in bid documents issued to prospective construction contractors. The City shall review the grading and building plans for compliance with this mitigation measure prior to issuance of a grading permit and building permit.
- MM 4.1-2 To reduce VOC emissions associated with architectural coating, the Project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize “Super-Compliant” VOC paints, which are defined in SCAQMD’s Rule 1113. Construction specifications shall be included in building specifications that ensure these requirements are implemented. The specifications shall be reviewed by the City for compliance with this mitigation measure prior to issuance of the Project’s building permit.



#### 4.1.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation Incorporated. As indicated in Table 4.1-16, *Overall Construction Emissions Summary – With Mitigation*, with implementation of the required mitigation, the Project’s construction-related VOC emissions would be reduced to below the SCAQMD regional threshold for this pollutant. Therefore, with implementation of the required mitigation, the Project’s construction and long-term operations would not exceed any of the SCAQMD Regional Thresholds or LSTs, and Project impacts due to a conflict with the 2022 SCAQMD AQMP would be reduced to less-than-significant levels.

Threshold b.: Less-than-Significant Impact with Mitigation Incorporated. As indicated in Table 4.1-16 Table 4.1-16, with implementation of Mitigation Measures MM 4.1-1 and MM 4.1-2, the Project would not result in a cumulatively-considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient air quality standard, and the Project would not conflict with the SCAQMD 2022 AQMP. Thus, with implementation of the required mitigation, Project construction-related regional emissions impacts would be reduced to less-than-significant levels.

**Table 4.1-16 Overall Construction Emissions Summary – With Mitigation**

Year	Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Summer</b>						
2024	1.65	7.19	61.47	0.11	6.03	2.86
2025	1.49	6.67	35.88	0.04	3.85	1.02
2026	21.81	9.49	50.78	0.06	4.69	1.24
<b>Winter</b>						
2024	1.57	7.24	32.70	0.04	3.85	1.02
2025	1.42	6.90	31.40	0.04	3.85	1.02
2026	1.34	6.66	30.34	0.04	3.85	1.02
<b>Maximum Daily Emissions</b>	<b>21.81</b>	<b>9.49</b>	<b>61.47</b>	<b>0.11</b>	<b>6.03</b>	<b>2.86</b>
SCAQMD Regional Threshold	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

(UC, 2024a, Table 3-6)



## 4.2 BIOLOGICAL RESOURCES

This Subsection evaluates the potential for Project-related activities to impact sensitive biological resources. The analysis in this Subsection primarily is based on information contained in a Biological Technical Report (BTR) prepared by Noreas, titled, “*General Biological Resources Assessment*” (herein, “BRA”), dated August 2023, and included as *Technical Appendix D* to this EIR (Noreas, 2023).

Based on analyses conducted as part of the Project’s Initial Study, and the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), the City determined that the Project would result in no impacts or less-than-significant impacts under several of the thresholds identified in Section IV (Biological Resources) of Appendix G to the CEQA Guidelines. Specifically, the Project’s Initial Study concluded that the Project would result in no impacts or less-than-significant impacts under the following thresholds of significance:

- b) *Would the Project have a substantially 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?*
- c) *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?*
- e) *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- f) *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?*

Accordingly, and based on the analysis contained in the Project’s Initial Study, no additional analysis of the above-listed thresholds is required. Refer to the Project’s Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.4 for a discussion and analysis of the above-listed thresholds not analyzed in this subsection.

This Subsection focuses on the Project’s potential to adversely affect the remaining thresholds of significance under Section IV (Biological Resources) of Appendix G to the CEQA Guidelines:

- a) *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?*
- d) *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?*



#### 4.2.1 EXISTING CONDITIONS

##### A. Vegetation/Land Use Mapping

For purposes of discussion within this Subsection, the term “Study Area” refers to the 25.69<sup>1</sup>-acre Project Site plus a 76.44-acre buffer area around the Project Site, for a total of 102.13 acres. Under existing conditions, the Project Site undergoes regular disking for fire safety, and shows signs of illegal dumping and off-road vehicle tracks. As shown on Figure 4.2-1, *Vegetation Communities and Land Cover Types*, under existing conditions the Study Area contains three vegetative communities/land cover types: ruderal, non-native grassland, and disturbed/developed. A summary of the vegetative community and land cover types within the Study Area is provided below. (Noreas, 2023, p. 5-1)

- **Developed/Disturbed:** Disturbed/Developed lands within the Study Area include locales that have been developed, paved, cleared, graded, or otherwise altered by anthropogenic activities (i.e., industrial warehouses, access roads, concrete pads, ornamental landscaping, industrial facilities, storage yards, residential housing, commercial enterprises, etc.). Common non-native plants species detected within this type included ripgut brome (*Bromus diandrus*), Russian thistle (*Kali tragus Kali tragus*) and puncture vine (*Tribulus terrestris*). (Noreas, 2023, p. 5-1)
- **Ruderal:** The ruderal vegetation community includes locales that have been subject to recent grading, clearing, or other physical human modification of soils and/or vegetation. These lands also include areas with exposed soils with minimal vegetation, and moderate cover by various non-native annual grasses, and weeds (adapted for growth on substrates subject to disturbance). Common non-native plants species detected within this type included Maltese star-thistle (*Centaurea melitensis*), stinknet (*Oncosiphon piluliferum*), and cheeseweed (*Malva neglecta*). The native species, including fiddleneck (*Amsinckia Intermedia*), also is represented, albeit infrequently, throughout this vegetation community. (Noreas, 2023, p. 5-1)
- **Non-Native Grassland:** The non-native grassland vegetation community is characterized by a dominance of nonnative grasses and forbs. Dominant plant species found in this community include ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), Russian thistle and other non-native forbs. (Noreas, 2023, p. 5-1)

##### B.

##### Special-Status Plants

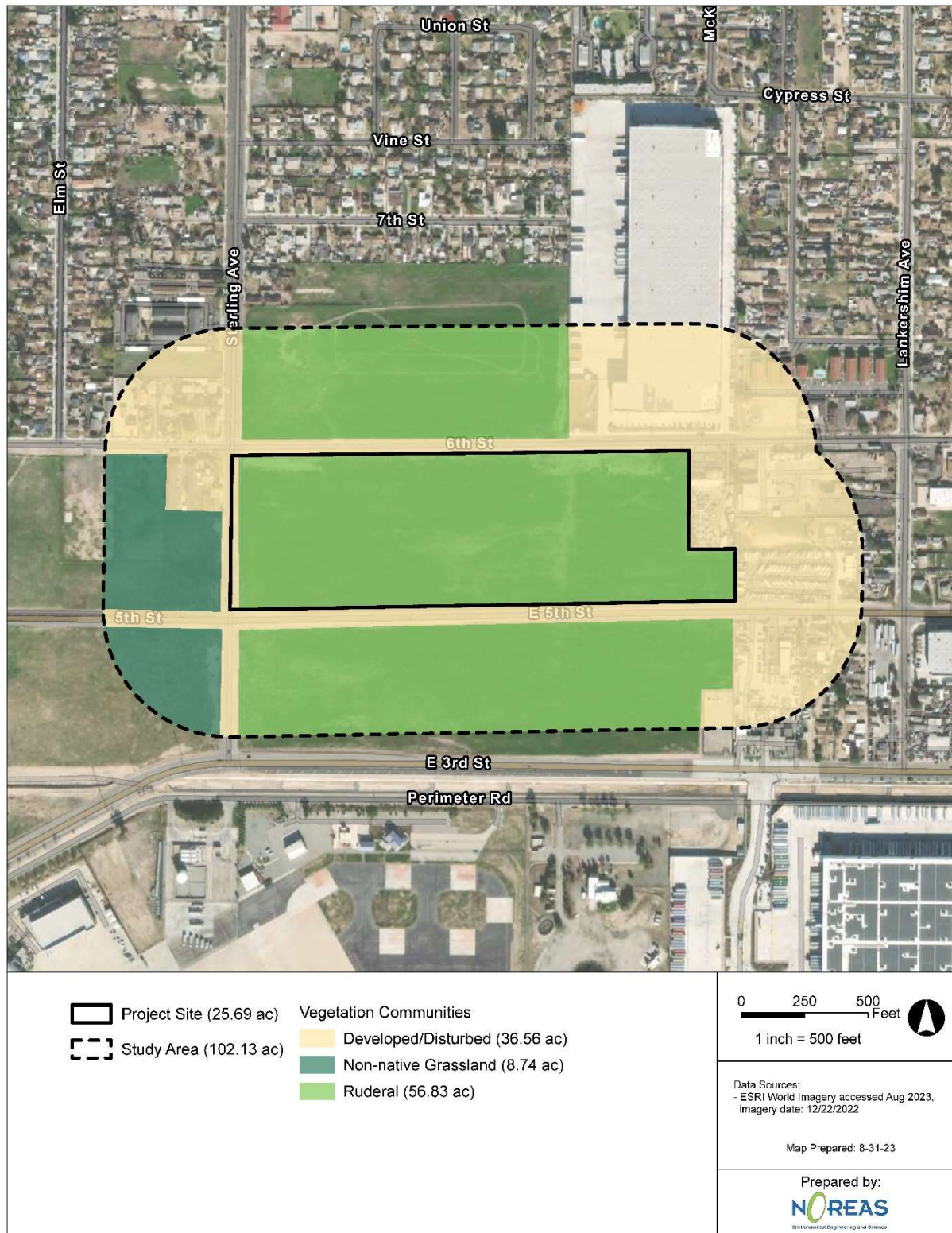
Focused botanical surveys were conducted by Noreas in March, April, May, and August 2023. Although several federal or State listed plant species have been documented within 10 miles of the Survey Area, no federal or State listed plant species were observed within the Study Area during the field surveys. Additionally, the Study Area includes no USFWS-designated critical habitat for plants. Special-status species known to

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<sup>1</sup> The General Biological Resources Assessment prepared for the Project analyzed the Project Site at 25.69 acres, which is slightly larger than the 25.12-acre Project Site provided in Section 3.0, *Project Description*. This minor overstatement of Project Site acreage does not result in a significant difference in impacts.



Figure 4.2-1 Vegetation Communities and Land Cover Types



(Noreas, 2023, Figure 3)



occur within 10 miles of the Study Area, and their potential for occurrence, are detailed within Appendix A of the Project's BRA (*Technical Appendix D*). Plant species observed during the field surveys are listed in Appendix D to the Project's BRA. (Noreas, 2023, p. 5-1)

### **C. Special-Status Animals**

No federal or State listed wildlife species were observed within the Study Area during the 2023 field surveys conducted by Noreas. The Study Area includes no USFWS-designated critical habitat for wildlife. Special-status species known to occur within 10 miles of the Study Area and their potential for occurrence are shown on Figure 4 of the Project's BRA (*Technical Appendix D*) and detailed within Appendix A to the Project's BRA. The result of the site surveys did not identify any nesting birds, did not identify any burrowing owls, and determined that, due to the lack of essential habitats, there is no suitable habitat present for San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*; herein, "SBKR"), Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*; herein, "LAPM"), or for the Delhi Sands flower-loving Fly (*Rhaphiomidas terminatus abdominalis*; herein, "DSF"). Neither remnant raptor nests, nor bat guano were detected within the Project Site. Wildlife species detected during the surveys are listed in Appendix D to the Project's BRA. Summarized results for the Burrowing Owl, SBKR, LAPM and DSF are included below. (Noreas, 2023, p. 5-2)

#### **1. Burrowing Owl**

Targeted burrowing owl (*Athene cunicularia*) surveys were conducted on four separate days by Noreas. No burrowing owls were detected nesting, foraging, or dispersing within the Study Area during the field surveys. Detailed Burrowing Owl survey methods, results, and assumptions are presented within Appendix F to the Project's BRA (*Technical Appendix D*). Numerous potential burrows of low quality and burrow complexes were observed within the Study Area; however, they lacked evidence of burrowing owls (i.e., tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, and nest burrow decoration materials). The lack of burrowing owls is likely a result of the depauperate landscape and the presence of owl predators. As such, the burrowing owl is considered to be absent from the Study Area. (Noreas, 2023, p. 5-2)

#### **2. San Bernardino Kangaroo Rat (SBKR) and Los Angeles Pocket Mouse (LAPM)**

During field surveys conducted by Noreas, no SBKR or LAPM individuals were observed. The current soil and vegetation composition renders the Project Site unsuitable for the habitation of SBKR or LAPM. The evident anthropogenic interference has significantly diminished the habitat quality of the Project Site, making it unfavorable for common and special status small mammals. As such, these species are considered absent from the Study Area. (Noreas, 2023, p. 5-2)

#### **3. Delhi Sands Flower-Loving Fly**

No areas of the Project Site were identified or mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey as having Delhi Sands soils, and the Project Site's surface soils do not possess the unique qualities of Delhi Sand soils. While a few indicator plants commonly associated with the presence of DSF were detected within the Project Site, these plants were isolated within the Project Site. Also, the Project Site is surrounded by existing developments, isolating, and detaching it from



connectively to Delhi Sands soils, or areas impacted by wind-driven processes. Without these critical habitat components, DSF is considered absent from the Project Site. (Noreas, 2023, p. 5-2)

**D. Nesting Birds**

During the biological surveys of the Project Site by Noreas, no nesting birds were observed. The Project Site lacks the essential habitat attributes needed to support these species. Nonetheless, the ruderal vegetation and non-native grassland observed on the Project Site has the potential to provide suitable habitat for nesting migratory birds. Birds observed within the study area consisted of commonly-occurring species, including, but not limited to, house finch (*Haemorrhous mexicanus*), western meadowlark (*Sturnella neglecta*), and common raven (*Corvus corax*). (Noreas, 2023, pp. 5-1 and 5-2)

**E. Critical Habitat**

As determined by Noreas during field surveys, the Study Area includes no USFWS-designated critical habitat for plants or wildlife. (Noreas, 2023, pp. 5-1 and 5-2)

**F. Jurisdictional Evaluation**

Based on a literature review and field survey, the Project Site is characterized as an upland, since no riparian or riverine habitats, or obvious indicators of well-defined water conveyance bed, bank or channel were detected. The topography indicates that the Project Site lacks waters which are typically subject to the Clean Water Act (CWA) and/or the California Fish and Game Code (CFGF) Section 1600 requirements. Furthermore, the National Wetland Inventory has no records of special aquatic resources within the Project Site. (Noreas, 2023, pp. 5-2 and 5-3)

Nonetheless, the Project Site does include a negligible number of signatures which meet the general definition and description for topographic lows, rills, gullies, swales, features excavated wholly in and that drain only upland areas, and erosional signatures. The majority of these features are a result of road improvements, explicitly those related to drainage infrastructure, where roadside swales and culverts are created out of uplands, and are maintained to prevent street flooding by conveying water away from the impermeable roads and other developed surfaces. These features are engineered and designed to collect precipitation and urban runoff along the roadway and other infrastructure. More importantly, these features lack connectivity, defined as the capacity to interact with the larger landscape, as they are not tributary to any larger drainage system. Nonetheless, they disperse water away from vital infrastructure after rainfall events, etc., resulting in notable erosion or sedimentation issues over time. This category of feature is routinely subject to anthropogenic disturbance in the form of repairs, clean-outs, enlargements, maintenance and other modifications. These are not natural streams, washes or rivers, etc.; rather, they are artificial features without the attributes of natural waterways, nor do they connect downstream habitats with other aquatic resources. As such, these features that are present on the Project Site are not considered to comprise jurisdictional resources pursuant to the CWA or CFGF. (Noreas, 2023, p. 5-3)



#### 4.2.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations governing the protection of biological resources.

##### **A. Federal Regulations**

##### **1. Endangered Species Act (ESA)**

The purpose of the federal Endangered Species Act (ESA) is to protect and recover imperiled species and the ecosystems upon which they depend. It is administered by the USFWS and the Commerce Department's National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. (USFWS, 2017)

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or maliciously harm them on federal land. Protection from commercial trade and the effects of federal actions do apply for plants. Section 7 of the ESA requires federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the USFWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species. (USFWS, 2017) There are no known federally endangered species on the Project Site.

##### **2. Clean Water Act Section 401**

Clean Water Act (CWA) Section 401 water quality certification provides states and authorized tribes with an effective tool to help protect water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. Under Section 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived Section 401 certification. Many states and tribes rely on § 401 certification to ensure that discharges of dredge or fill material into a water of the U.S. do not cause unacceptable environmental impacts and, more generally, as their primary regulatory tool for protecting wetlands and other aquatic resources. However, Section 401 is limited in scope and application to situations involving federally-permitted or licensed activities that may result in a discharge to a water of the U.S. If a federal permit or license is not required, or would authorize impacts only to waters that are not waters of the U.S., the activity is not subject to the CWA Section 401. (EPA, 2022) The proposed Project does not entail any actions that would be subject to Section 401.



### **3. *Clean Water Act Section 404***

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Wetlands subject to Clean Water Act Section 404 are defined as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Activities in waters of the United States regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming and forestry activities). (EPA, n.d.) There are no features on the Project Site subject to Section 404.

### **4. *Executive Order 11990 – Protection of Wetlands***

The purpose of Executive Order (EO) 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet these objectives, the Order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. (FEMA, 2023) There are no wetlands on the Project Site.

### **5. *Migratory Bird Treaty Act (16 USC Section 703-712)***

The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations. The migratory bird species protected by the MBTA are listed in 50 CFR 10.13. The USFWS has statutory authority and responsibility for enforcing the MBTA (16 U.S.C. 703-712). The MBTA implements Conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. (USFWS, 2020) While Project Site lacks the essential habitat attributes needed to support migratory birds, vegetation is present on the Project Site which has the potential to provide suitable habitat for nesting migratory birds.

## **B. *State Regulations***

### **1. *California Endangered Species Act (CESA)***

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The CDFW works with interested persons, agencies, and organizations to protect and preserve such sensitive resources and their habitats. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. CDFW may authorize the take of any such species if certain conditions are met. (CDFW, n.d.)



Section 2081 subdivision (b) of the California Fish and Game Code (CFGF) allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met. These authorizations are commonly referred to as incidental take permits (ITPs). If a species is listed by both the federal ESA and CESA, CFGF Section 2080.1 allows an applicant who has obtained a federal incidental take statement (federal Section 7 consultation) or a federal incidental take permit (federal Section 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary under CESA. A Safe Harbor Agreement (SHA) authorizes incidental take of a species listed as endangered, threatened, candidate, or a rare plant, if implementation of the agreement is reasonably expected to provide a net conservation benefit to the species, among other provisions. (CDFW, n.d.) There are no known species on the Project Site subject to the CESA. Burrowing owl habitat is present on the Project Site, and though the landscape is depauperate and owl predators are present, the species is migratory and has the potential to occupy the site.

## **2. *Natural Community Conservation Planning Act (NCCP)***

CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP. CDFW and the USFWS provide the necessary support, direction, and guidance to NCCP participants. (CDFW, n.d.)

There are currently 13 approved NCCPs (includes 6 subarea plans) and 22 NCCPs in the active planning phase (includes 10 subarea plans) in the State of California, which together cover more than 7 million acres and will provide conservation for nearly 400 special status species and a wide diversity of natural community types throughout California. (CDFW, n.d.) The Project Site is not included in an approved NCCP.

## **3. *California Fish and Game Code, Section 1600, et seq.***

CFGF Section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or (3) deposit debris, waste or other materials that could pass into any river, stream, or lake. The CFGF indicates that "any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. (CDFW, n.d.) There are no features on the Project Site subject to CFGF Section 1602.

## **4. *Native Plant Protection Act (NPPA) of 1977***

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are



protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations. (CDFW, n.d.) There are no rare plants on the Project Site protected under the NPPA.

### **5. *Unlawful Take or Destruction of Nests or Eggs (CFGC Sections 3503.5-3513)***

Section 3503.5 of the CFGC specifically protects birds of prey, stating: “It is unlawful to take, possess, or destroy any . . . [birds-of-prey] or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3513 of the CFGC duplicates the federal protection of migratory birds, stating: “It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act 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 Migratory Bird Treaty Act.” (CA Legislative Info, n.d.) While Project Site lacks the essential habitat attributes needed to support migratory birds, including having low ecological value as a functional habitat for native flora and fauna and being severely movement constrained by the surrounding development, vegetation is present on the Project Site which has the potential to provide suitable habitat for nesting migratory birds.

### **6. *Porter-Cologne Water Quality Act***

The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected;
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason; and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation. (SWRCB, 2014)

The Porter-Cologne Act established nine Regional Water Quality Control Boards (RWQCBs) (based on hydrogeologic barriers) and the State Water Resources Control Board (SWRCB), which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRBC allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and the RWQCBs have numerous Non-Point Source (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management. (SWRCB, 2014)

The Project Site is in the jurisdiction of the Santa Ana RWQCB. Each RWQCB regulates discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System



(NPDES) permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions. (SWRCB, 2014)

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. The plan applicable to the Project Site and published by the Santa Ana RWQCB is the *Santa Ana River Basin Plan*. Each water quality control plan identifies the existing and potential beneficial uses of waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the EPA, when approved they become water quality standards under the CWA. (SWRCB, 2014)

### **C. Local Regulations**

#### **1. City of San Bernardino Municipal Code**

The City of San Bernardino Municipal Code contains several provisions regulating tree removals and requires the preparation of an arborists survey and issuance of a tree removal permit for the removal of more than 5 healthy shade trees of aesthetic value. If removal of trees would be required to implement the Project, the following provisions would apply.

Section 15.34.020 of the City of San Bernardino Municipal Code states the following:

*It is unlawful for any person, firm, corporation, partnership or association, either as owner, agent or otherwise, to cut down, uproot, destroy and/or remove more than five (5) trees within any thirty-six (36) month period from a development site or parcel of property without first being issued a permit from the Development Services Department of the City of San Bernardino.*

Section 19.28.100 of the City of San Bernardino Municipal Code states the following:

*Removal of healthy, shade providing, aesthetically valuable trees shall be discouraged. In the event that more than five trees are to be cut down, uprooted, destroyed or removed within a 36 month period, a permit shall first be issued by the Department.*

*An arborist survey and report may be required at the developer's expense, to evaluate existing trees prior to the issuance of a tree removal permit, as determined by the Director of Community Development. Unless there is a pre-approved tree replacement plan, each tree that is removed in a new subdivision and is determined to be of significant value by the Community Development Director*



*shall be replaced with a 36 inch box specimen tree in the subdivision in addition to any other required landscaping. Such a plan does not necessarily require a tree for tree replacement provision. Commercial tree farms, City Government projects, and individual single-family residential lots less than one acre shall be exempt from this provision.*

#### 4.2.3 BASIS FOR DETERMINING SIGNIFICANCE

Based on the results of the Initial Study, it was determined that the Project has the potential to result in a significant impact to biological resources if the Project or any Project-related component would:

- a. 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.*
- d. Would the Project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The above-listed thresholds are derived directly from Section IV (Biological Resources) of Appendix G to the CEQA Guidelines and addresses the typical, adverse effects related to biological resources that could result from development projects. Refer also to the Project's Initial Study (*Technical Appendix A*) for a discussion of potential impacts to biological resources that were determined to be less than significant as part of the Project's scoping process.

#### 4.2.4 IMPACT ANALYSIS

***Threshold a.: 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 Wildlife or U.S. Fish and Wildlife Service?***

Based on the results of the Project's BTR, and based on the focused botanical surveys that were conducted by Noreas in March, April, May, and August 2023, Noreas determined that due to the generally developed nature of the areas surrounding the Project Site and due to a lack of suitable habitats, no sensitive plant or animal species occur on the Project Site under existing conditions. Wildlife species observed within the Project Site consisted of commonly-occurring species. No federal or State listed plant or wildlife species were observed on the Project Site during field surveys. No burrowing owls were detected nesting, foraging, or dispersing within the Project Site. Neither San Bernardino Kangaroo Rat nor Los Angeles pocket mouse were detected during field surveys, and no areas on the Project Site were identified or mapped by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soils Survey as having Delhi Sand soils which could provide habitat for the Delhi Flowering Loving Fly. Therefore, and with exception of potential impacts to nesting birds (as discussed below), the proposed Project would result in no impacts to sensitive plant or wildlife species, either directly or indirectly. (Noreas, 2023, p. 5-1 through 5-3)



Although the Project Site lacks the essential habitat attributes needed to support nesting birds, there is still the potential to impact natural bird nests if vegetation providing nesting habitat is removed during the nesting season (February 1 through September 15). Impacts to nesting birds are prohibited by the California Fish and Game Code and/or the federal MBTA. In order to provide a conservative analysis of the Project's potential impacts and in order to address the remote potential of nesting birds being present on the Project Site at the time the Project's construction activities commence, the Project's potential to result in impacts to nesting and migratory birds conservatively are identified as a potentially significant impact prior to mitigation.

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to native open space. Potential indirect effects associated with development include water quality impacts associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. However, the Project Site is bordered by roads and existing and planned development on all sides. Undeveloped parcels in private ownership to the north, south, and west have similar biological characteristics as the Project Site. Construction and operational activities on the Project Site have the potential to result in minor indirect effects on the biological resources existing on these adjacent undeveloped parcels; however, such effects would be less than significant through compliance with regulatory requirements and Project design features, such as requirements for construction dust control (SCAQMD Rule 403) the water quality measures required by regulatory requirements and best management practices (refer to EIR Subsection 5.4.8, *Hydrology and Water Quality*), and landscape design (refer to EIR Figure 3-4 for the Project's conceptual landscape plan). Therefore, indirect impacts to sensitive plant and wildlife species would be less than significant.

***Threshold d.: 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?***

The Project Site does not contain natural, surface drainage/watercourse or ponding features. Additionally, there are no water bodies on or adjacent to the Project Site that could support fish. Therefore, there is no potential for the Project to interfere with the movement of native resident or migratory fish. The Project Site also does not serve as a wildlife corridor nor is it connected to an established corridor, and there are no native wildlife nurseries on or adjacent to the Site. (Noreas, 2023, pp. 5-2 and 5-3) Therefore, there is no potential for the Project to impede the use of a native wildlife nursery Site.

The Project would remove vegetation from the Project Site that serves as potential roosting and nesting habitat for birds common to the area. Several non-sensitive bird species were observed on the Project Site during field surveys, including, but not limited to, house finch (*Haemorrhous mexicanus*), western meadowlark (*Sturnella neglecta*), and common raven (*Corvus corax*). Although these species are not considered special-status or sensitive based on their prevalence in southern California, the MBTA and California Fish and Game Code are in place to protect these bird species, among others, while nesting. If Project construction occurs during the avian nesting season (February 1 through September 15) and active nests are present on the Project Site,



significant impacts to nesting birds could occur. The Project's potential to impact nesting birds is a significant impact for which mitigation is required.

#### 4.2.5 CUMULATIVE IMPACTS

As indicated under the analysis of Threshold a., impacts to sensitive plant and wildlife species that may occur as a result of the proposed Project would be limited to potential impacts to sensitive nesting migratory birds, if nesting birds are present in or nearby the Project's impact footprint at the time that construction activities commence. As other cumulative developments in the region also have the potential to result in impacts to nesting birds regulated by the MBTA and CFGC, Project impacts to nesting birds would represent a cumulatively-considerable impact of the proposed Project for which mitigation would be required.

As indicated under the analysis of Threshold d., although the Project has no potential to interfere with wildlife movement in the local area due to the generally developed nature of the areas surrounding the Project site and the lack of natural drainages, the Project would remove vegetation that has the potential to support nesting birds protected by the MBTA and CFGC. A wide range of habitat and vegetation types have the potential to support nesting birds; therefore, it is likely that other development projects within the cumulative study area also may impact nesting birds. Thus, prior to mitigation, the Project has the potential to contribute to a cumulatively-considerable impact to nesting birds.

#### 4.2.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project would not result in direct or indirect impacts to special-status plants or special-status animals. However, the Project has the potential to impact active migratory bird nests if vegetation is removed during the nesting season (February 1 through September 15), which is considered a significant direct and cumulatively-considerable impact of the proposed Project.

Threshold d: Significant Direct and Cumulatively-Considerable Impact. There is no potential for the Project to interfere with the movement of fish or impede the use of a native wildlife nursery site. However, the Project has the potential to impact nesting migratory birds protected by the MBTA and California Fish and Game Code, should habitat removal occur during the nesting season and should nesting birds be present.

#### 4.2.7 MITIGATION

MM 4.2-1 As a condition of tree removal permits, clearing permits, and any other permits that would authorize vegetation removal, the disturbance to and removal of trees and other potential bird nesting habitat shall be prohibited during the migratory bird nesting season (February 1 through September 15) unless a migratory bird nesting survey is completed. If vegetation removal is planned to occur during the migratory bird nesting season (February 1 – September 15), then a migratory bird nesting survey shall be completed in accordance with the following requirements:



- a) Within three (3) days prior to initiating tree removals and/or vegetation clearing, a nesting bird survey shall be conducted by a qualified biologist within the suitable habitat to be removed and within a 250-foot radius.
- b) If the survey identifies the presence of active sensitive bird nests, then the nests shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (i) the adult birds have not begun egg-laying and incubation; or (ii) the juveniles from the occupied nests are capable of independent survival.
- c) If the biologist is not able to verify any of the conditions from sub-item “b,” above, then no disturbance shall occur within a buffer zone specified by the qualified biologist for each nest or nesting site. The buffer zone shall be species-appropriate (no less than 100-foot radius around the nest for non-raptors and no more than a 500-foot radius around the nest for raptors, or as otherwise determined by the qualified biologist) and shall be sufficient to protect the nest from direct and indirect impacts from construction activities. The nests and buffer zones shall be field checked approximately weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist with City concurrence verify that the nests are no longer occupied and/or juvenile birds can survive independently from the nests.

#### 4.2.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.2-1 would ensure that pre-construction surveys are conducted for nesting and migratory birds protected by the federal MBTA and/or CFCG during the breeding season to determine presence or absence prior to disturbance of habitat with the potential to support nesting birds. If sensitive nesting birds are present, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct impacts and cumulatively-considerable impacts to nesting and migratory birds protected by the federal MBTA and/or California Fish and Game Code would be reduced to below a level of significance.

Threshold d.: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.2-1 would ensure that pre-construction surveys are conducted for nesting birds protected by State and federal regulations in the event that vegetation is removed from the Project Site during the breeding season. If nesting birds are present on the Project Site, the mitigation requires avoidance of active bird nests in conformance with accepted protocols and regulatory requirements. With implementation of the required mitigation, potential direct and cumulatively-considerable impacts to nesting birds protected by State and federal regulations would be reduced to below a level of significance.



## 4.3 CULTURAL RESOURCES

The analysis in this Subsection is primarily based on a report prepared by CRM TECH titled “Historical/Archaeological Resources Survey Report” (herein, “HARS”), dated December 12, 2023, and included as *Technical Appendix E* to this EIR (CRM, 2023).

Based on analyses conducted as part of the Project’s Initial Study, and the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), the City determined that the Project would result in no impacts under one threshold identified in Section V (Cultural Resources) of Appendix G to the CEQA Guidelines with mandatory adherence to regulatory requirements. Specifically, the Project’s Initial Study concluded that the Project would result in no impact under the following threshold of significance:

- c. Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

Accordingly, no additional analysis of the above-listed threshold is required. Refer to the Project’s Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.5 for a discussion and analysis of the above-listed threshold not analyzed in this subsection.

This Subsection focuses on the Project’s potential to adversely affect the remaining thresholds of significance under Section V (Cultural Resources) of Appendix G to the CEQA Guidelines:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.*
- b. Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5.*

### 4.3.1 EXISTING CONDITIONS

#### A. Cultural Setting

##### 1. Overview

The earliest evidence of human occupation in inland southern California, or the Inland Empire region, was discovered below the surface of an alluvial fan in the northern portion of the Lakeview Mountains, overlooking the San Jacinto Valley, with radiocarbon dates clustering around 9,500 B.P. Another site found near the shoreline of Lake Elsinore, close to the confluence of Temescal Wash and the San Jacinto River, yielded radiocarbon dates between 8,000 and 9,000 B.P. Additional sites with isolated Archaic dart points, bifaces, and other associated lithic artifacts from the same age range have been found in the Cajon Pass area, typically atop knolls with good viewsheds (CRM, 2023, p. 5)

The cultural prehistory of inland southern California has been summarized into numerous chronologies. Although the beginning and ending dates of different cultural horizons vary regionally, the general framework of regional prehistory can be broken into three primary periods: (CRM, 2023, p. 5)



- **Paleoindian Period (ca. 18,000-9,000 B.P.):** Native peoples of this period created fluted spearhead bases designed to be hafted to wooden shafts. The distinctive method of thinning bifaces and spearhead preforms by removing long, linear flakes leaves diagnostic Paleoindian markers at tool-making sites. Other artifacts associated with the Paleoindian toolkit include choppers, cutting tools, retouched flakes, and perforators. Sites from this period are very sparse across the landscape and most are deeply buried. (CRM, 2023, p. 5)
- **Archaic Period (ca. 9,000-1,500 B.P.):** Archaic sites are characterized by abundant lithic scatters of considerable size with many biface thinning flakes, bifacial preforms broken during manufacture, and well-made groundstone bowls and basin metates. As a consequence of making dart points, many biface thinning waste flakes were generated at individual production stations, which is a diagnostic feature of Archaic sites. (CRM, 2023, p. 5)
- **Late Prehistoric Period (ca. 1,500 B.P.-contact):** Sites from this period typically contain small lithic scatters from the manufacture of small arrow points, expedient groundstone tools such as tabular metates and unshaped manos, wooden mortars with stone pestles, acorn or mesquite bean granaries, ceramic vessels, shell beads suggestive of extensive trading networks, and steatite implements such as pipes and arrow shaft straighteners. (CRM, 2023, p. 5)

## 2. *Ethnohistoric Context*

The present-day San Bernardino area is generally recognized as a part of the homeland of the Serrano people, although other Native groups also claim the area as a part of their cultural influence. The territory of the Serrano includes the northern portion of the Inland Empire, the San Bernardino Mountains, part of the San Gabriel Mountains, the Antelope Valley, and the Mojave River Valley in the southern portion of the Mojave Desert, reaching as far east as the Cady, Bullion, Sheep Hole, and Coxcomb Mountains. The name “Serrano” was derived from a Spanish term meaning “mountaineer” or “highlander.” (CRM, 2023, pp. 5-6)

Prior to European contact, the Serrano were primarily hunter-gatherers and occasionally fishers, and settled mostly on elevated terraces, hills, and finger ridges near where flowing water emerged from the mountains. They were loosely organized into exogamous clans, which were led by hereditary heads, and the clans in turn were affiliated with one of two exogamous moieties. The clans were patrilineal, but their exact structure, function, and number are unknown, except that the clans were the largest autonomous political and landholding units within Serrano Ancestral lands. There was no pan-tribal political union among the clans, but they shared strong trade, ceremonial, and marital connections that sometimes also extended to other surrounding nations, such as the Kitanemuk, the Tataviam, and the Cahuilla. (CRM, 2023, p. 6)

Although contact with Europeans may have occurred as early as 1771 or 1772, Spanish influence on Serrano lifeways was minimal until the 1810s, when a mission asistencia was established on the southern edge of Serrano territory. Between then and the end of the mission era in 1834, most of the Serrano in the western portion of their traditional territory were removed to the nearby missions. In the eastern portion, a series of punitive expeditions in 1866-1870 resulted in the death or displacement of almost all remaining Serrano population in the San Bernardino Mountains. Today, most Serrano descendants are affiliated with the San



Manuel Band of Mission Indians, the Morongo Band of Mission Indians, or the Serrano Nation of Indians. (CRM, 2023, p. 6)

### 3. *European Settlement*

The San Bernardino Valley, along with the rest of Alta California, was claimed by Spain in the late 18th century, and the first European explorers traveled through the area as early as 1772, three years after the beginning of Spanish colonization. For nearly four decades afterwards, however, the arid inland valley received little attention from the European colonizers, who concentrated their efforts along the Pacific coast. Following the establishment of Mission San Gabriel in 1771, the San Bernardino Valley became a part of the mission's vast land holdings. The name "San Bernardino" was bestowed on the region in the 1810s, when the asistencia and an associated mission rancho, both bearing that name, were established in present-day Loma Linda. (CRM, 2023, p. 6)

After gaining independence from Spain in 1821, the Mexican authorities began in 1834 the process of secularization to dismantle the mission system in Alta California. During the next 12 years, former mission ranchos throughout Alta California were surrendered to the Mexican government, and subsequently divided and granted to various prominent citizens of the province. In 1842, Rancho San Bernardino was granted to members of a prominent Los Angeles family, the Lugos. An adobe house built by one of the grantees at the site of today's county courthouse became the earliest non-Indian settlement in San Bernardino. As elsewhere in Alta California during the Spanish and Mexican periods, cattle raising was the primary economic activity on Rancho San Bernardino and other nearby land grants, often with the local Native American population providing the labor force. (CRM, 2023, pp. 6-7)

After the American annexation of Alta California in 1848, the Lugos sold the entire Rancho San Bernardino land grant in 1851 to a group of Mormon settlers, who promptly established a fortified settlement around the Lugo adobe and founded the town of San Bernardino. The early growth of the Mormon colony was promising. It became the county seat of the newly created San Bernardino County in 1853 and was incorporated as a city the next year. In 1857, however, the budding town suffered a devastating setback when half of its population, responding to a recall from Mormon leaders, left California for Utah, causing the city to disincorporate. (CRM, 2023, p. 7)

In the 1880s, spurred by the completion of the Santa Fe Railway in 1885, the rise of the profitable citrus industry, and a general land boom that swept through much of southern California, San Bernardino gradually recovered and reincorporated in 1886. With the selection of the City by the Santa Fe Railway as its regional headquarters, San Bernardino embarked on a period of steady growth that lasted well into the 20th century. During World War II, the growth of San Bernardino was further boosted when the U.S. Army Air Corps established an airport and military base in the Project vicinity in 1940-1941. The history of the base was summarized by the Norton Air Force Base (AFB) Museum as follows: (CRM, 2023, p. 7)

*The base began as Municipal Airport, San Bernardino under Army Air Corps jurisdiction. During the summer of 1941, it became a training base to meet the needs of the 30,000 Pilot Training Program. In December 1941, within days after the attack on Pearl Harbor, combat-ready fighter planes arrived to*



*protect the Los Angeles area from enemy attack. In July 1942 the airport was renamed San Bernardino Army Air Field and the San Bernardino Air Depot was established. The facility's primary function was the repair and maintenance of aircraft. During the war, the Air Transport Command used the field and in 1943, maintenance operations for gas turbine engines were added. (CRM, 2023, p. 7)*

*After WWII, the base became one of three major maintenance facilities for jet engines. The base was transferred to US Air Force in 1948 and in 1950 was renamed Norton AFB after Captain Leland Norton, a World War II bomber pilot who ordered the crew of his crippled plane to bail out over France just before perishing with the craft. Operations at Norton were expanded to include maintenance, storage, and logistics support for various missile programs... The base was selected for closure by the Base Realignment and Closure Commission in 1988 and closed on March 31, 1994. (CRM, 2023, p. 7)*

### **B. Existing Site Conditions**

The Project Site is relatively level with a low-lying undulating surface and is routinely maintained for fire fuel control purposes. The nearest natural water source is City Creek, which once flowed roughly 1,000 feet south of the Project Site prior to channelization but is now channelized and runs approximately 600 feet to the south of the Project Site along the northern edge of the San Bernardino International Airport (SBIA) property. The flora in the area is predominantly invasive, consisting mainly of puncturevine with some jimsonweed and Russian thistle. Elevations on the Project Site range approximately from 1,106 feet above mean sea level (amsl) on the western side of the site to 1,122 feet amsl at the southeastern corner of the site. The surface sediments are composed of fine-grained silty sand that is loosely packed. Approximately 90% of the Project Site has been disturbed by past farming operations and limited residential development, with the residential structures no longer present. Other evidence of disturbances includes recent refuse dumping, especially along the northern boundary of the Project Site. (CRM, 2023, pp. 4-5)

### **C. Archaeological and Historical Resources Assessment**

An analysis of the Project's potential to contain historic and archaeological resources was conducted by CRM TECH. The analysis by CRM TECH included a historical/archaeological records search, a Sacred Lands File search, consultation with community representatives, a historical background search, and a field survey conducted on June 27, 2023. Additionally, the City conducted consultation with Native American tribes, which also informed the information presented herein.

#### **1. Historical/Archaeological Resources Records Search**

The records search results reviewed as part of the Project's HARS (*Technical Appendix E*) indicate that the Project area had not been surveyed systematically for cultural resources prior to the current study, although several linear surveys had been completed along the northern and southern Project boundaries, along 5<sup>th</sup> and 6<sup>th</sup> Streets. Within the one-mile scope of the records search, a total of 34 previous studies had been reported to the South Central Coastal Information Center (SCCIC) and 75 historical/archaeological resources have been recorded as a result. The vast majority of these resources represented historic-period buildings in the surrounding area, including many on the former Norton Air Force Base. (CRM, 2023, p. 9)



One of these known cultural resources, designated Site 36-010820 in the California Historical Resources Inventory, consisted of the remains of the San Bernardino, Arrowhead and Waterman Railroad, also known as the Harlem Motor Road or the Highlands Motor Line. Although originally recorded in the downtown area of San Bernardino, the rail line is known to have once traversed across the northern edge of the Project area along 6<sup>th</sup> Street. Constructed in 1888 as a narrow-gauge motor line from San Bernardino to Harlem Hot Springs, the San Bernardino, Arrowhead, and Waterman Railroad operated for 20 years before being acquired by the Pacific Electric Railway Company and eventually dismantled sometime around the 1940s. None of the other previously identified cultural resources were found in the immediate vicinity of the Project area. (CRM, 2023, p. 9)

## **2. *Sacred Lands File Search***

In response to CRM TECH's inquiry, the Native American Heritage Commission (NAHC) reported in a letter dated June 4, 2023, that the Sacred Lands File identified unspecified Native American cultural resource(s) in the general vicinity of the Project area. Noting that tribes are not required to and do not always record their sacred sites in the Sacred Lands File, the NAHC recommended that local Native American groups be contacted for further information and provided a referral list of potential contacts from tribes with traditional cultural affiliation to the Project vicinity. (CRM, 2023, p. 9)

## **3. *Historical Background Research***

Historical sources consulted as part of the Project's HARS indicate that settlement and development activities began in the Project's vicinity shortly after the establishment of the Mormon colony of San Bernardino in 1851. By the 1890s, a grid of roads had been established around the Project Site, including the forerunners of present-day 6<sup>th</sup> Street and Sterling Avenue, along with the San Bernardino, Arrowhead, and Waterman Railroad and some scattered buildings. On the south side of the Project Site, 5<sup>th</sup> Street was extended across this area in the 1940s-1950s, after the establishment of Norton Air Force Base further to the south. (CRM, 2023, p. 9)

During the 1930s, the entire Project area was under cultivation as agricultural fields. By the early 1950s, a group of buildings, apparently residences, had come into being in the northeastern corner of the Project area, while the rest of the Project Site continued to be used for agriculture. All of the buildings were removed in 1966-1968 under unknown circumstances, and the farming operation had evidently ceased on the property at least by 1980. Since then, the Project area has remained vacant and largely unused. (CRM, 2023, p. 10)

## **4. *Field Survey***

During the field survey of the Project Site conducted by CRM TECH, the only features of prehistoric or historical origin encountered were two concrete foundations in the northeastern portion of the Project Site, left by the residential buildings that once stood in that area in the 1950s-1960s. The foundation closer to the eastern Project boundary has been dismantled and reduced to rubble. The other one remains intact but is partially covered by soil. The visible surface of this foundation measures 30 feet by 25 feet. No associated historical artifact deposit was observed around either foundation. (CRM, 2023, p. 11)



#### 4.3.2 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations governing the protection of cultural resources.

##### ***A. Federal Regulations***

##### ***1. National Historic Preservation Act***

The National Historic Preservation Act of 1966 (NHPA) was passed primarily to acknowledge the importance of protecting our nation's heritage. While Congress recognized that national goals for historic preservation could best be achieved by supporting the drive, enthusiasm, and wishes of local citizens and communities, it understood that the federal government must set an example through enlightened policies and practices. In the words of the Act, the federal government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony." (NPS, 2024a)

Section 106 of NHPA granted legal status to historic preservation in federal planning, decision-making, and project execution. Section 106 requires all federal agencies to take into account the effects of their actions on historic properties, and provide the Advisory Council on Historic Preservation with a reasonable opportunity to comment on those actions and the manner in which federal agencies are taking historic properties into account in their decisions. (NPS, 2024a)

A number of additional executive and legislative actions have been directed toward improving the ways in which all federal agencies manage historic properties and consider historic and cultural values in their planning and assistance. Executive Order 11593 (1971) and, later, Section 110 of NHPA (1980, amended 1992), provided the broadest of these mandates, giving federal agencies clear direction to identify and consider historic properties in federal and federally assisted actions. The National Historic Preservation Amendments of 1992 further clarified Section 110 and directed federal agencies to establish preservation programs commensurate with their missions and the effects of their authorized programs on historic properties. (NPS, 2024a)

##### ***2. National Register of Historic Places (NRHP)***

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the NPS's National Register of Historic Places (NRHP) is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. (NPS, 2024b)

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance. Nominations can be submitted to a State Historic Preservation Office (SHPO) from property owners, historical societies, preservation organizations, governmental agencies, and other individuals or groups. The SHPO notifies affected property owners and local governments and solicits public comment. If the owner (or a majority of owners for a district nomination) objects, the property cannot be listed but may be forwarded to the National Park Service (NPS) for a



Determination of Eligibility (DOE). Listing in the National Register of Historic Places provides formal recognition of a property's historical, architectural, or archeological significance based on national standards used by every state. (NPS, 2024b)

Under federal law, the listing of a property in the National Register places no restrictions on what a non-federal owner may do with their property up to and including destruction, unless the property is involved in a project that receives federal assistance, usually funding or licensing/permitting. National Register listing does not lead to public acquisition or require public access. (NPS, 2024b)

### **3. *American Indian Religious Freedom Act***

The American Indian Religious Freedom Act (AIRFA) requires each executive branch agency with statutory or administrative responsibility for the management of federal lands shall, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies also are required to maintain the confidentiality of sacred sites. Each executive branch agency with statutory or administrative responsibility for the management of Federal lands are required to implement procedures to ensure reasonable notice is provided of proposed actions or land management policies that may restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites. (NOAA, n.d.)

### **4. *Native American Graves Protection and Repatriation Act (NAGPRA)***

The Native American Graves Protection and Repatriation Act (NAGPRA; Public Law 101-601; 25 U.S.C. 3001-3013) describes the rights of Native American lineal descendants, Indian tribes, and Native Hawaiian organizations with respect to the treatment, repatriation, and disposition of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, referred to collectively in the statute as cultural items, with which they can show a relationship of lineal descent or cultural affiliation. (NPS, 2023a)

One major purpose of this statute is to require that federal agencies and museums receiving federal funds inventory holdings of Native American human remains and funerary objects and provide written summaries of other cultural items. The agencies and museums must consult with Indian Tribes and Native Hawaiian organizations to attempt to reach agreements on the repatriation or other disposition of these remains and objects. Once lineal descent or cultural affiliation has been established, and in some cases the right of possession also has been demonstrated, lineal descendants, affiliated Indian Tribes, or affiliated Native Hawaiian organizations normally make the final determination about the disposition of cultural items. Disposition may take many forms from reburial to long term curation, according to the wishes of the lineal descendent(s) or culturally affiliated Tribe(s). (NPS, 2023a)

The second major purpose of the statute is to provide greater protection for 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. NAGPRA requires that Indian tribes or Native Hawaiian organizations be consulted whenever archeological investigations encounter, or are expected to encounter, Native American cultural items or when such items are unexpectedly discovered on Federal or tribal



lands. Excavation or removal of any such items also must be done under procedures required by the Archaeological Resources Protection Act. This NAGPRA requirement is likely to encourage the in-situ preservation of archaeological sites, or at least the portions of them that contain burials or other kinds of cultural items. (NPS, 2023a)

Other provisions of NAGPRA: (1) stipulate that illegal trafficking in human remains and cultural items may result in criminal penalties; (2) authorizes the Secretary of the Interior to administer a grants program to assist museums and Indian Tribes in complying with certain requirements of the statute; (3) requires the Secretary of the Interior to establish a Review Committee to provide advice and assistance in carrying out key provisions of the statute; authorizes the Secretary of the Interior to penalize museums that fail to comply with the statute; and, (5) directs the Secretary to develop regulations in consultation with this Review Committee. (NPS, 2023a)

## **5. *Federal Antiquities Act***

The Antiquities Act is the first law to establish that archeological sites on public lands are important public resources. It obligates federal agencies that manage the public lands to preserve for present and future generations the historic, scientific, commemorative, and cultural values of the archaeological and historic sites and structures on these lands. It also authorizes the President to protect landmarks, structures, and objects of historic or scientific interest by designating them as National Monuments. (NPS, 2023b)

### ***B. State Regulations***

#### **1. *California Administrative Code, Title 14, Section 4308***

Section 4308, *Archaeological Features*, of Title 14 of the California Administrative Code provides that: “No person shall remove, injure, disfigure, deface, or destroy any object of archaeological, or historical interest or value.” (NPS, n.d.)

#### **2. *California Code of Regulations Title 14, Section 1427***

California Code of Regulations Title 14, Section 1427 provides that: “No person shall collect or remove any object or thing of archeological or historical interest or value, nor shall any person injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archeological or historical interest or value is found.” (NAHC, n.d.)

#### **3. *California Register of Historic Resources***

The State Historical Resources Commission has designed this program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The Register is the authoritative guide to the state's significant historical and archeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. (OHP, n.d.)



In order for a resource to be included on the Register of Historic Resources, the resources must meet one of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4). (OHP, n.d.)

For resources included on the Register of Historic Resources, environmental review may be required under CEQA if property is threatened by a project. Additionally, local building inspectors must grant code alternatives provided under State Historical Building Code. Further, the local assessor may enter into contract with property owner for property tax reduction pursuant to the Mills Act. A property owner also may place his or her own plaque or marker at the site of the resource. (OHP, n.d.)

Consent of owner is not required, but a resource cannot be listed over an owner's objections. The State Historical Resources Commission (SHRC) can, however, formally determine a property eligible for the California Register if the resource owner objects. (OHP, n.d.)

#### **4. *State Health and Safety Code***

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery..." until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from "internment or a place of storage while awaiting internment" with the intent to sell them or to dissect them with "malice or wantonness" is a public offense punishable by imprisonment in a state prison.

#### **5. *California Code of Regulations Section 15064.5***

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (CEQA Guidelines) establishes the procedure for determining the significance of impacts to archeological and historical resources, as well as classifying the type of resource. Cultural resources are aspects of the environment that require identification and assessment for potential significance. The evaluation of cultural resources under CEQA is based upon the definitions of resources provided in CEQA Guidelines § 15064.5, as follows: (Westlaw, 2024)

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4850 et seq.).



- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code § 5024.1, Title 14 CCR, Section 4852) including the following:
  - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - Is associated with the lives of persons important in our past;
  - 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
  - Has yielded, or may be likely to yield, information important in prehistory or history.
- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

#### 4.3.3 BASIS FOR DETERMINING SIGNIFICANCE

Based on the results of the Initial Study, it was determined that the Project has the potential to result in a significant impact to cultural resources if the Project or any Project-related component would:

- a. *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.*
- b. *Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5.*



The above-listed thresholds are derived directly from Section V of Appendix G to the CEQA Guidelines and addresses the typical, adverse effects related to cultural resources that could result from development projects. Refer also to the Project's Initial Study (*Technical Appendix A*) for a discussion of potential impacts for which it was determined that the Project would have no impact as part of the Project's scoping process.

#### 4.3.4 IMPACT ANALYSIS

***Threshold a.: Would the Project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?***

No potential historical resources were previously recorded within or adjacent to the Project Site boundaries, and none were found during the field survey conducted by CRM TECH. The only features more than 50 years of age found during the survey were the foundational remains of two buildings; residences constructed in the 1940s-1950s and demolished in the 1960s. Neither of the foundational remains occur with a notable deposit of historic-period artifacts, and thus neither demonstrates any archaeological data potential. With the buildings no longer extant, such common, ubiquitous late-historic-period structural remains retain no integrity to be associated with any persons or events in their history, nor do they exhibit any other merits. As such, the foundations in the Project area are not considered potential historical resources. Based on these findings, the Project's impacts to historical resources would be less than significant. (CRM, 2023, p. 13)

Although no significant historical resources were identified based on the investigation conducted by CRM TECH, and though the likelihood of *in situ* subsurface cultural resources is low given the amount of previous disturbance and its location in an area historically subject to flooding, the Project area has the potential to contain previously-unidentified subsurface historical resources that could be inadvertently impacted during grading and ground-disturbing activities. Although the Project Site is overlain with artificial fill, the Project has the potential to impact previously-undiscovered historical resources because native soil is expected to occur within 2 to 5.5 feet of the ground surface (SoCalGeo, 2023a, p. 5). Grading within the western portion of the site would consist of fill; however, grading within the eastern portion of the site would consist of cut, with depth of grading extending to approximately 6.5 feet below the current ground surface elevation. As such, grading within the eastern portions of the Project site would impact native soils on site, which in turn could result in impacts to subsurface historical resources, if present within the subsurface soils. Accordingly, the Project's potential to impact subsurface historical resources within native soils on site represents a potentially significant impact for which mitigation would be required.

***Threshold b.: Would the Project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?***

No known archaeological resources are located on the Project Site. Geologic maps show the surface sediments in the Project vicinity to be primarily Holocene-age sand and gravel associated with alluvial fans and/or active stream channels. The origins of these sediments are closely related to City Creek, which once flowed roughly 1,000 feet south of the Project location prior to channelization, and to the Santa Ana River about one mile further to the south, which was historically prone to massive flooding events before the construction of Seven Oaks Dam upstream and other flood Control projects. (CRM, 2023, p. 12)



Given its location along on the floodplains of these natural waterways, the Project location would not have been considered a favorable environment for long-term settlement in prehistoric times, nor would the setting be conducive for the preservation of subsurface archaeological deposits. Any cultural remains encountered in this area would be of questionable contextual integrity, as their occurrence may have resulted from secondary deposition by fluvial activities on City Creek or the Santa Ana River. Furthermore, the ground surface in almost the entire Project area has been disturbed in the past by agricultural operations and, later, construction activities, which have left little vestige of the native landscape today. Consequently, the subsurface sediments in the Project area appear to be relatively low in sensitivity for potentially significant archaeological deposits of prehistoric origin. (CRM, 2023, p. 12) Nonetheless, ground-disturbing construction activities in native soil would have the remote potential to uncover archaeological resources as defined in Section 15064.5, and impacts would be potentially significant if the resources were not properly identified and treated. As such, mitigation measures would be required.

#### 4.3.5 CUMULATIVE IMPACTS

As indicated under the analysis of Threshold a., the Project would not result in a significant impact due to a substantial adverse change in the significance of a known historical resource as defined in CEQA Guidelines Section 15064.5. However, there is a possibility that previously unidentified subsurface historic resources may be inadvertently impacted by the Project during ground-disturbing construction activities. As other cumulative developments within the region also have the potential to impact historic resources, this is considered a potential cumulatively-considerable impact for which mitigation would be required.

As indicated under the analysis of Threshold b., there are no known archaeological resources at the Project Site. Additionally, grading throughout the Project Site would not involve disturbances to any native soils that have a reasonable potential to contain previously-undiscovered archaeological resources. As such, it is highly unlikely that archaeological resources would be uncovered during Project-related grading activities. Nonetheless, the possibility exists that archaeological resources as defined in CEQA Guidelines Section 15064.5 could be discovered and impacted during Project-related ground-disturbing construction activities that occur in native soil. As other cumulative developments within the region also have the potential to impact archaeological resources, this is considered a potential cumulatively-considerable impact for which mitigation would be required.

#### 4.3.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Significant Direct and Cumulatively-Considerable Impact. The Project Site does not contain any known historical resources as defined in CEQA Guidelines Section 15064.5. However, subsurface historical resources could be uncovered during grading and ground-disturbing construction activities. Thus, there is a possibility that subsurface historic resources may be impacted by development of the Project as proposed. This is a potentially significant impact for which mitigation would be required.

Threshold b.: Significant Direct and Cumulatively-Considerable Impact. No archaeological resources are known to be present in the Project area. Furthermore, the ground surface in almost the entire Project area has



been disturbed in the past by agricultural operations and, later, construction activities, which have left little vestige of the native landscape today. As such, it is highly unlikely that significant archaeological resources would be uncovered during Project-related grading activities. Nonetheless, if Project-related ground-disturbing construction activities in native soil encounter an archaeological resource as defined in Section 15064.5, impacts would be potentially significant if the resource is not properly identified and treated.

#### 4.3.7 MITIGATION

The following mitigation measure shall apply to reduce to below a level of significance the Project's potential impacts to subsurface historical resources, should such resources be encountered during ground-disturbing construction activities.

MM 4.3-1 As a condition of grading permit issuance, the construction contractor personnel involved in soil-disturbing operations shall be trained by a qualified professional historic resources consultant on the visual identification of historic resources. If historic resources are discovered during any earth-moving operations associated with the proposed Project, the construction contractor shall be required by its contract to temporarily halt all work within 60 feet of the discovered resource until the professional historic resources consultant is called to the site to evaluate the suspected resource. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Any material uncovered and that is determined by the professional historical resources consultant to comprise a historically significant resource shall be curated at a public, non-profit institution with a research interest in the materials, if such an institution agrees to accept the material. If no institution accepts the historic material, they shall be offered to a local school, historical society, or Yuhaaviatam of San Manuel Nation Cultural Resources Management Department for educational purposes.

The following mitigation measure shall apply to reduce to below a level of significance the Project's potential impacts to subsurface archaeological resources, should such resources be encountered during ground-disturbing construction activities.

MM 4.3-2 As a condition of grading permit issuance, the construction contractor personnel involved in native soil-disturbing operations (which includes clearing, grubbing, tree removals and plantings, mass or rough grading, trenching, wall footings, fence and sign post placement and removal, excavation for all utility, drainage, and irrigation lines, and any other activity involving disturbance of native soil), shall be trained by a qualified professional archaeologist meeting the Secretary of the Interior Standards and/or a representative from the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians) on the visual identification of archaeological and tribal cultural resources. If suspected resources are discovered during Project construction, the construction contractor shall be required by its contract to temporarily halt all work within 60 feet of the discovered resource until a professional archaeologist meeting the Secretary of the Interior Standards is called to the site to evaluate the suspected resource. Work on the other portions of the Project outside of the buffered area may continue during this assessment period.



YSMN shall be contacted regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. If it is determined that the resource has no tribal cultural significance to YSMN but may have significance to another Native American tribe that engaged in AB 52 consultation, that Native American tribe shall be contacted and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

- MM 4.3-3 If significant pre-contact and/or historic-era cultural resources, as defined by CEQA are discovered and avoidance cannot be ensured, the archaeologist shall develop a Treatment Plan, the drafts of which shall be provided to the City of San Bernardino and YSMN for review, comment, and concurrence. If it is determined that the resource has no tribal cultural significance to YSMN but it may have significance to another Native American tribe that engaged in AB 52 consultation, then the draft Treatment Plan shall be provided to the Native American tribe for review, comment, and concurrence. Any and all findings of discovered resources will be subject to the protocol detailed within the Treatment Plan. The archaeologist shall monitor the remainder of the Project's soil-disturbing activities and shall implement the Treatment Plan accordingly.
- MM 4.3-4 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Project Applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or Applicant shall, in good faith, consult with YSMN throughout the life of the project.
- MM 4.3-5 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

#### 4.3.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-1 would ensure the proper identification and subsequent treatment of any significant historic resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important subsurface historic resources (if such resources are unearthed during Project construction) would be reduced to less-than-significant levels. Cumulatively-considerable impacts would likewise be reduced to less than significant.

Threshold b.: Less-than-Significant with Mitigation Incorporated. Implementation of Mitigation Measure MM 4.3-2 through MM 4.3-5 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to important archaeological resources (if such resources are unearthed during Project construction) would be reduced to



less-than-significant levels. Cumulatively-considerable impacts would likewise be reduced to less than significant.



## **4.4 ENERGY**

The analysis in this Subsection is primarily based on information contained in a technical report prepared by Urban Crossroads, Inc. titled, “5<sup>th</sup> & Sterling Energy Analysis” (herein, “EA”), dated February 29, 2023 (UC, 2024c). The technical report is included as *Technical Appendix F* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources used in this Subsection.

This Subsection focuses on the Project’s potential to adversely affect the thresholds of significance under Section VI (Energy) of Appendix G to the CEQA Guidelines:

- a. *Would the Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*
- b. *Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

### **4.4.1 EXISTING CONDITIONS**

#### **A. Overview**

The most recent data for California’s estimated total energy consumption and natural gas consumption is from 2021, released by the United States (U.S.) Energy Information Administration’s (EIA) California State Profile and Energy Estimates in 2021 and included (UC, 2024c, p. 8):

- As of 2021, approximately 7,359 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2021, approximately 605 million barrels of petroleum
- As of 2021, approximately 2,101 billion cubic feet of natural gas
- As of 2021, approximately 1 million short tons of coal

According to the EIA, in 2022 the U.S. petroleum consumption comprised about 90% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. In 2022, about 251,923 million gallons (or about 5.99 million barrels) of finished petroleum products were consumed in the U.S., an average of about 690 million gallons per day (or about 16.4 million barrels per day). In 2021, California consumed approximately 12,157 million gallons in motor gasoline (33.31 million per day) and approximately 3,541 million gallons of diesel fuel (9.7 million per day). (UC, 2024c, p. 8)

The most recent data provided by the EIA for energy use in California is reported from 2021 and provided by demand sectors as follows (UC, 2024c, p. 8):

- Approximately 37.8% transportation sector
- Approximately 23.2% industrial sector
- Approximately 20.0% residential sector
- Approximately 19.0% commercial sector



According to the EIA, California used approximately 247,250 gigawatt hours of electricity in 2021. By sector in 2021, residential uses utilized 36.5% of the state's electricity, followed by 43.9% for commercial uses, 19.2% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building (UC, 2024c, p. 8).

According to the EIA, California used approximately 200,871 million therms of natural gas in 2021. In 2021 (the most recent year for which data is available), by sector, industrial uses utilized 33% of the state's natural gas, followed by 30% used as fuel in the electric power sector, 21% from residential, 11% from commercial, 1% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself. While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas. (UC, 2024c, pp. 7-8)

In 2022, total system electric generation for California was 287,220 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 203,257 GWh which accounted for approximately 71% of the electricity it uses; the rest was imported from the Pacific Northwest (12%) and the U.S. Southwest (17%). Natural gas is the main source for electricity generation at 47.46% of the total in-state electric generation system power as shown in Table 4.4-1, *Total Electricity System Power (California 2022)*. (UC, 2024c, p. 8)

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below (UC, 2024c, p. 9):

- In 2022, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2022, the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- In 2020, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all but three other states.
- In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49% of California's in-state electricity generation. Natural gas fueled another 42%. Nuclear power supplied almost all the rest.
- In 2022, California was the fourth-largest electricity producer in the nation. The state was also the nation's third-largest electricity consumer, and additional needed electricity supplies came from out-of-state generators.

As indicated above, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient (UC, 2024c, p. 9).



Table 4.4-1 Total Electricity System Power (California 2022)

Fuel Type	California In-State Generation (GWh)	% of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Total California Energy Mix (GWh)	Total California Power Mix
Coal	273	0.13%	181	5,716	5,897	6,170	2.15%
Natural Gas	96,457	47.46%	44	7,994	8,038	104,495	36.38%
Oil	65	0.03%	-	-	-	65	0.2%
Other (Waste Heat/Petroleum Coke)	315	0.15%	-	-	-	315	0.11%
Unspecified	-	0.0%	12,485	7,943	20,428	20,428	7.11%
Total Thermal and Unspecified	<b>97,110</b>	<b>47.78%</b>	<b>12,710</b>	<b>21,653</b>	<b>34,363</b>	<b>121,473</b>	<b>45.77%</b>
Nuclear	17,627	8.67%	397	8,342	8,739	26,366	9.18%
Large Hydro	14,607	7.19%	10,803	1,118	11,921	26,528	9.24%
Biomass	5,366	2.64%	771	25	797	6,162	2.15%
Geothermal	11,110	5.47%	253	2,048	2,301	13,412	4.67%
Small Hydro	3,005	1.48%	211	13	225	3,230	1.12%
Solar	40,494	19.92%	231	8,225	8,456	48,950	17.04%
Wind	13,938	6.86%	8,804	8,357	17,161	31,099	10.83%
Total Non-GHG and Renewables	<b>106,147</b>	<b>52.22%</b>	<b>21,471</b>	<b>28,129</b>	<b>49,599</b>	<b>155,747</b>	<b>54.23%</b>
<b>SYSTEM TOTALS</b>	<b>203,257</b>	<b>100.0%</b>	<b>34,180</b>	<b>49,782</b>	<b>83,962</b>	<b>287,220</b>	<b>100.0%</b>

(UC, 2024c, Table 2-1)

## B. Electricity

The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the South Coast Air Basin (SCAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2022 IEPR's provides information and policy recommendations on advancing a clean, reliable, and affordable energy system. (UC, 2024c, p. 11)

California's electricity industry is an organization of traditional utilities, private generating companies, and State agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the



State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities. (UC, 2024c, p. 11)

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State. (UC, 2024c, p. 11)

Electricity is currently provided to the Project Site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2022 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers. Table 4.4-2, *SCE 2022 Power Content Mix*, shows SCE's specific proportional shares of electricity sources in 2022.

**Table 4.4-2 SCE 2022 Power Content Mix**

Energy Resources	2022 SCE Power Mix
<b><i>Eligible Renewable</i></b>	<b>33.2%</b>
Biomass & Waste	0.1%
Geothermal	5.7%
Eligible Hydroelectric	0.5%
Solar	17.0%
Wind	9.8%
<b><i>Coal</i></b>	<b>0.0%</b>
<b><i>Large Hydroelectric</i></b>	<b>3.4%</b>
<b><i>Natural Gas</i></b>	<b>24.7%</b>
<b><i>Nuclear</i></b>	<b>8.3%</b>
<b><i>Other</i></b>	<b>0.1%</b>
Unspecified Sources of power*	30.3%
<b>Total</b>	<b>100%</b>

\* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.  
(UC, 2024c, Table 2-2)



As indicated in Table 4.4-2, the 2022 SCE Power Mix has renewable energy at 33.2% of the overall energy resources. Geothermal resources are at 5.7%, wind power is at 9.8%, large hydroelectric sources are at 3.4%, solar energy is at 17.0%, and coal is at 0%. (UC, 2024c, p. 11)

### C. Natural Gas

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC). (UC, 2024c, p. 12)

*“The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.*

*California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800,000 customers. In 2018, California gas utilities forecasted that they would deliver about 4,740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.*

*The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.*

*A significant amount of gas (about 19%, or 1,131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.*

*SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.*

*Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California gas utilities are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja -*



*Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the California Public Utilities Commission may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.*

*The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.*

*Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.*

*PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.*

*Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.*

*The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.*

*Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this*



*service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.*

*In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).*

*In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.*

*Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.*

*In order to properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts*



*are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California.”*

As indicated in the preceding discussions, natural gas is available from a variety of in-State and out-of-State sources and is provided throughout the State in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State. (UC, 2024c, p. 15)

#### **D. Transportation Energy Resources**

The Department of Motor Vehicles (DMV) identified 36.2 million registered vehicles in California, and those vehicles consume an estimated 17.2 billion gallons of fuel each year<sup>1</sup>. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets. (UC, 2024c, pp. 14-15)

California’s on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008, it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 8% of the nation's total consumption. The State is the largest U.S. consumer of motor gasoline and jet fuel, and 83% of the petroleum consumed in California is used in the transportation sector. (UC, 2024c, p. 16)

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2021, about 33% of the natural gas delivered to consumers went to the State's industrial sector, and about 31% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2021. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 12% of the deliveries to end users and the transportation sector consumed the remaining 1%. (UC, 2024c, p. 16)

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<sup>1</sup> Fuel consumptions estimated utilizing information from EMFAC2021.



#### 4.4.2 APPLICABLE REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to energy use and conservation.

##### **A. Federal Regulations**

###### **1. Energy Policy Act**

The Energy Policy Act addresses energy production in the United States, including: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Tribal energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology. For example, the Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of greenhouse gases. Another provision of the Act increases the amount of biofuel that must be mixed with gasoline sold in the United States. (EPA, 2024b)

###### **2. Energy Independence and Security Act**

The Energy Independence and Security Act was signed into law on December 19, 2007 by President Bush. The goals of the Act are to move the United States toward greater energy independence and security; increase the production of clean renewable fuels; protect consumers; increase the efficiency of products, buildings, and vehicles; promote research on and deploy greenhouse gas capture and storage options; improve the energy performance of the Federal Government; and increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy. The Energy Independence and Security Act reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards. (EPA, 2024c)

##### **B. State Regulations**

###### **1. Integrated Energy Policy Report (IEPR)**

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2022 IEPR was adopted February 2023, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2022 IEPR introduces a new framework for embedding equity and environmental justice at the CEC and the California Energy Planning Library which allows for easier access to energy data and analytics for a wide range of users. Additionally, energy reliability, western electricity integration, gasoline cost factors and price spikes, the role of hydrogen in California's clean energy



future, fossil gas transition and distributed energy resources are topics discussed within the 2022 IEPR. (UC, 2024c, pp. 18-19)

## **2. *State of California Energy Plan***

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. 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 several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access. (UC, 2024c, p. 19)

## **3. *California Code Title 24, Part 6, Energy Efficiency Standards***

California Code Title 24, Part 6 (also referred to as the California Energy Code) was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. California's building efficiency standards are updated on an approximately three-year cycle. The 2019 Standards for building construction, which went into effect on January 1, 2020, improved upon the former 2016 Standards for residential and nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar PV systems, homes built under the 2019 standards will use about 53% less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30% less energy due to lighting upgrades compared to the prior code. The 2022 version of Title 24 was adopted by the CEC and will be effective on January 1, 2023. The 2022 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, and update indoor and outdoor lighting standards for nonresidential buildings. (UC, 2024c, p. 19)

## **4. *California Renewable Portfolio Standards (RPS)***

The CEC implements and administers portions of California's Renewables Portfolio Standard (RPS). Under the RPS, 25% of retail sales were originally required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and California Air Resources Board (CARB) to



include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal (CEC, n.d.).

### **5. *Pavley Fuel Efficiency Standards (AB 1493)***

AB 1493 required the CARB to adopt the nation's first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the "Pavley" regulations that reduced GHG emissions in new passenger vehicles from model year 2009 through 2016. The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles on June 30, 2009. It is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. CARB has since adopted a new approach to cars and light trucks by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB, n.d.).

### **6. *Advanced Clean Cars Program***

In 2012, the CARB adopted a set of regulations to control emissions from passenger vehicle model years 2017 through 2025, collectively called Advanced Clean Cars. Advanced Clean Cars, developed in coordination with the U.S. EPA and National Highway Traffic Safety Administration (NHTSA), combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle III Regulation for criteria (LEV III Criteria) and GHG (LEV III GHG) emissions, and a technology-forcing mandate for zero-emission vehicles (ZEV). The goal of the program is to guide the development of environmentally advanced cars that would continue to deliver the performance, utility, and safety, car owners have come to expect. Advanced Clean Cars includes the following elements (CARB, n.d.):

- LEV III Criteria: Reducing Smog-Forming Pollution. CARB adopted new emission standards to reduce smog-forming emissions (also known as "criteria pollutants") beginning with 2015 model year vehicles. The goal of this regulation is to have cars emit 75 percent less smog-forming pollution than the average car sold in 2012 by 2025.
- LEV III GHG: Reducing GHG Emissions. California's GHG regulations are projected to reduce GHG emissions from new vehicles by approximately 40 percent (from 2012 model vehicles) in 2025.
- ZEV Regulation: Promoting the Cleanest Cars. The ZEV regulation is designed to achieve the State's long-term emission reduction goals by requiring auto manufacturers to offer for sale specific numbers of the very cleanest cars available. These vehicle technologies include full battery-electric, hydrogen fuel cell, and plug-in hybrid-electric vehicles. Updated estimates using publicly available information show about 8 percent of California new vehicle sales in 2025 will be ZEVs and plug-in hybrids.

### **7. *Advanced Clean Trucks Program***

In June 2020, CARB adopted a new Rule requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024 (CARB, n.d.). By 2045, every new truck sold in



California will be required to be zero-emission (ibid.). Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035 (ibid.). By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales (ibid.). CARB reports that as of 2020, most commercially-available models of zero-emission vans, trucks and buses operate less than 100 miles per day (ibid.). Commercial availability of electric-powered long-haul trucks is very limited (ibid.). However, as technology advances over the next 20 years, zero-emission trucks will become suitable for more applications, and several truck manufacturers have announced plans to introduce market ready zero-emission trucks in the future (ibid.). When commercial availability of electric-powered long-haul trucks is more readily available, implementation of the Advanced Clean Trucks Regulation is anticipated to significantly reduce GHG emissions and energy usage statewide.

#### **8. *Senate Bill 350 (SB 350) – Clean Energy and Pollution Reduction Act of 2015***

In October 2015, the legislature approved, and the Governor signed, SB 350, which reaffirms California’s commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions (CA Legislative Info, 2015):

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the CPUC, the CEC, and local publicly owned utilities.
- Reorganize the ISO to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

#### **9. *Senate Bill 1020 – Clean Energy, Jobs, and Affordability Act of 2022***

SB 1020, also known as the Clean Energy, Jobs, and Affordability Act of 2022, revised State policy to include interim targets requiring 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. SB 1020 also requires each State agency to ensure that zero-carbon resources and eligible renewable energy resources supply 100 percent of electricity procured to serve their agency by December 31, 2035. In addition, SB 1020 requires the State Water Project (SWP) to procure eligible renewable energy and zero-carbon resources as necessary to meet the clean energy requirements specified for all State agencies. Finally, SB 1020 requires the CPUC to develop utility affordability metrics for both electricity and gas service. (CA Legislative Info, 2022a)



**C. Local Regulations**

**1. City of San Bernardino General Plan**

The City of San Bernardino Utilities Element identifies goals and policies to ensure the efficient use of energy and the building design/construction of buildings with energy efficiency. The following relevant and applicable policies from the City of San Bernardino General Plan Utilities Element have been identified for the Project.

**Goal 9.6:** Ensure an adequate, safe, and orderly supply of electrical energy is available to support existing and future land uses within the City on a project level.

- **Policy 9.6.5:** Encourage and promote the use of energy-efficient (U.S. Department of Energy “Energy Star” or equivalent) lighting fixtures, light bulbs, and compact fluorescent bulbs in residences, commercial, and public buildings, as well as in traffic signals and signs where feasible.

The City of San Bernardino Energy and Water Conservation Element identifies goals and policies to ensure the efficient use and conservation of valuable energy and water resources. The following relevant and applicable policies from the City of San Bernardino General Plan Energy and Water Conservation Element have been identified for the Project.

**Goal 13.1:** Conserve scarce energy resources.

- **Policy 13.1.2:** Ensure the incorporation of energy conservation features in the design of all new construction and site development in accordance with State Law.
- **Policy 13.1.7:** Ensure that new development consider the ability of adjacent properties to utilize energy conservation design.
- **Policy 13.1.9:** Encourage increased use of passive and active solar and wind design in existing and new development (e.g., orienting buildings to maximize exposure to cooling effects of prevailing winds, daylighting design, natural ventilation, space planning, thermal massing and locating landscaping and landscape structures to shade buildings).

**4.4.3 BASIS FOR DETERMINING SIGNIFICANCE**

Section VI of Appendix G to the California Environmental Quality Act (CEQA) Guidelines addresses typical adverse effects due to energy consumption, and includes the following threshold questions to evaluate a project’s impacts on energy resources.

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



The following thresholds are derived directly from Section VI of Appendix G to the CEQA Guidelines and the County's Environmental Assessment form. The proposed Project would have a significant impact on energy resources if construction and/or operation of the Project would:

- c. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*
- d. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

#### **4.4.4 IMPACT ANALYSIS**

##### **A. Methodology for Calculating Project Energy Demands**

Information from the CalEEMod Version 2022 outputs for the Project's Air Quality Impact Analysis (EIR *Technical Appendix C1*; herein, "AQIA") was utilized in this analysis, detailing Project related construction equipment, transportation energy demands, and facility energy demands. (UC, 2024c, p. 23)

In May 2023, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1.1.12. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources as well as energy usage. Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendix 4.1 of the Project's EA (*Technical Appendix F*). (UC, 2024c, p. 23)

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC2021) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2024 through 2026 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Outputs from the EMFAC2021 model run are provided in Appendix 4.2. (UC, 2024c, pp. 23-24)



***Threshold a.: Would the Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?***

Provided below is an assessment of the Project’s potential construction-related energy resource use impacts, as well as operational-related energy resource use impacts that would be associated with implementation of the Project.

***B. Construction Energy Demands***

***1. Construction Power Cost***

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost. For purposes of analysis, construction of Project is expected to commence in December 2024 and would last through November 2026. This EIR conservatively assumes that the building construction, paving, and architectural coating phases may overlap. This assumption is made to ensure that potential environmental impacts are thoroughly analyzed and considered, providing a more cautious assessment of the Project’s effects. The construction schedule utilized in the analysis, shown previously in Table 3-1, represents a “worst-case” analysis scenario<sup>2</sup>. Should construction occur any time after the respective dates, impacts would be expected to decrease due to regulatory requirements becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet. (UC, 2024c, p. 24)

***2. Construction Electricity Usage***

The total Project construction electricity usage is the summation of the products of the power cost by the utility provider cost per kilowatt hour (kWh) of electricity. SCE’s general service rate schedule was used to determine the Project’s electrical usage. As of January 1, 2024, SCE’s general service rate is \$0.14 per kilowatt hours (kWh) of electricity for industrial services. As shown on Table 4.4-3, *Construction Electricity Usage* the total electricity usage from on-site Project construction related activities is estimated to be approximately 478,108 kWh. (UC, 2024c, p. 25)

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<sup>2</sup> At the time the original modeling was prepared for this analysis, the Project’s construction start date was anticipated to be July 2024. Since that time, the construction schedule has been revised and a new start date of December 2024 is anticipated. The underlying modeling which is based on the July 2024 start date is more conservative and is worst-case because overall construction equipment emissions are reduced over time as older pieces of construction equipment are phased out of construction equipment fleets and replaced with newer, cleaner equipment.



Table 4.4-3 Construction Electricity Usage

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
High-Cube Transload Warehouse	\$0.14	243,409
Parking Lot	\$0.14	68,324
Other Asphalt Surfaces	\$0.14	166,375
<b>CONSTRUCTION ELECTRICITY USAGE</b>		<b>478,108</b>

(UC, 2024c, Table 4-3)

### 3. Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. A summary of construction equipment by phase is provided in EIR Table 3-2. Consistent with industry standards and typical construction practices, each piece of equipment listed in EIR Table 3-2 would operate up to a total of eight (8) hours per day, or more than two-thirds of the period during which construction activities are allowed pursuant to the code. All equipment used during Project construction will meet or exceed CARB Tier 4 Interim emission standards. (UC, 2024c, p. 25)

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4.4-4, *Construction Equipment Fuel Consumption Estimates*. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines. For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered, which is consistent with industry standards. (UC, 2024c, p. 26)

Diesel fuel would be supplied by existing commercial fuel providers serving the Project area and region<sup>3</sup>. As previously presented in Table 4.4-4, Project construction activities would consume an estimated 84,746 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require ongoing or permanent commitment of diesel fuel resources for this purpose. (UC, 2024c, p. 28)

<sup>3</sup> Based on Appendix A of the CalEEMod User’s Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.



**Table 4.4-4 Construction Equipment Fuel Consumption Estimates**

Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Site Preparation	20	Rubber Tired Dozers	367	3	8	0.40	3,523	3,809
		Crawler Tractors	87	4	8	0.43	1,197	1,294
Grading	45	Excavators	36	2	8	0.38	219	532
		Graders	148	1	8	0.41	485	1,181
		Rubber Tired Dozers	367	1	8	0.40	1,174	2,857
		Scrapers	473	4	8	0.48	7,265	17,672
		Crawler Tractors	87	2	8	0.43	599	1,456
Building Construction	440	Cranes	367	1	8	0.29	851	20,250
		Forklifts	82	3	8	0.20	394	9,361
		Generator Sets	14	1	8	0.74	83	1,971
		Tractors/Loaders/Backhoes	84	3	8	0.37	746	17,741
		Welders	46	1	8	0.45	166	3,939
Paving	35	Pavers	81	2	8	0.42	544	1,030
		Paving Equipment	89	2	8	0.36	513	970
		Rollers	36	2	8	0.38	219	414
Architectural Coating	35	Air Compressors	37	1	8	0.48	142	269
<b>CONSTRUCTION FUEL DEMAND (GALLONS FUEL)</b>								<b>84,746</b>

(UC, 2024c, Table 4-5)

#### 4. Construction Trips and Vehicle Miles Travelled (VMT)

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. The number of workers and vendor trips are presented below in Table 4.4-5, *Construction Trips and VMT*. It should be noted that for vendor trips, specifically, CalEEMod only assigns vendor trips to the Building Construction phase. Vendor trips would likely occur during all phases of construction. As such, the CalEEMod defaults for vendor trips have been adjusted based on a ratio of the total vendor trips to the number of days of each subphase of activity. (UC, 2024c, p. 28)

#### 5. Construction Worker Fuel Estimates

With respect to estimated VMT for the Project, the construction worker trips (personal vehicles used by workers commuting to the Project from home) would generate an estimated 1,983,848 VMT during the 23 months of construction. Based on CalEEMod methodology, it is assumed that 50% of all construction worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1<sup>4</sup>), and 25% are from

<sup>4</sup> Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.



light-duty-trucks (LDT2<sup>5</sup>). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA (*Technical Appendix C1*). (UC, 2024c, p. 28)

**Table 4.4-5 Construction Trips and VMT**

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day
Site Preparation	18	4
Grading	25	8
Building Construction	234	79
Paving	15	0
Architectural Coating	47	0

(UC, 2024c, Table 4-6)

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources. EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the San Bernardino (SC) sub-area for the 2024 through 2026 calendar years. Data from EMFAC2021 is shown in Appendix 4.2 to the Project's EA (*Technical Appendix F*). (UC, 2024c, pp. 28-29)

As shown in Table 4.4-6, *Construction Worker Fuel Consumption Estimates*, the estimated annual fuel consumption resulting from Project construction worker trips is 69,748 gallons during full construction of the Project. It should be noted that construction worker trips would represent a "single-event" gasoline fuel demand and would not require ongoing or permanent commitment of fuel resources for this purpose. (UC, 2024c, p. 30)

## 6. Construction Vendor/Hauling Fuel Estimates

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction) would generate an estimated 363,528 VMT along area roadways for the Project over the duration of construction activity. It is assumed that 50% of all vendor trips are from medium-heavy duty trucks (MHD), 50% of all vendor trips are from heavy-heavy duty trucks (HHD), and 100% of all hauling trips are from HHDs. These assumptions are consistent with the CalEEMod defaults utilized within the AQIA. Vehicle fuel efficiencies for MHDs and HHDs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHD and HHD vehicle classes within the San Bernardino (SC) sub-area for the 2024 through 2026 calendar years. Data from EMFAC2021 is shown in Appendix 4.2 to the Project's EA (*Technical Appendix F*). (UC, 2024c, p. 30)

Based on Table 4.4-7, *Construction Vendor Fuel Consumption Estimates*, it is estimated that 51,110 gallons of fuel will be consumed related to construction vendor trips during full construction of the Project. It should

<sup>5</sup> Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.



be noted that Project construction vendor trips would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. (UC, 2024c, p. 31)

**Table 4.4-6 Construction Worker Fuel Consumption Estimates**

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2024	LDA						
	Site Preparation	20	9	18.5	3,330	31.57	105
	Grading	45	13	18.5	10,823	31.57	343
	Building Construction	67	117	18.5	145,022	31.57	4,593
	LDT1						
	Site Preparation	20	5	18.5	1,850	24.59	75
	Grading	45	7	18.5	5,828	24.59	237
	Building Construction	67	59	18.5	73,131	24.59	2,974
	LDT2						
	Site Preparation	20	5	18.5	1,850	24.51	75
	Grading	45	7	18.5	5,828	24.51	238
	Building Construction	67	59	18.5	73,131	24.51	2,984
2025	LDA						
	Building Construction	261	117	18.5	564,935	32.57	17,347
	LDT1						
	Building Construction	261	59	18.5	284,882	25.11	11,343
2026	LDT2						
	Building Construction	261	59	18.5	284,882	25.24	11,288
	LDA						
	Building Construction	112	117	18.5	242,424	33.47	7,242
	Paving	35	8	18.5	5,180	33.47	155
	Architectural Coating	35	24	18.5	15,540	33.47	464
	LDT1						
	Building Construction	112	59	18.5	122,248	25.64	4,767
	Paving	35	4	18.5	2,590	25.64	101
	Architectural Coating	35	12	18.5	7,770	25.64	303
	LDT2						
	Building Construction	112	59	18.5	122,248	25.93	4,714
	Paving	35	4	18.5	2,590	25.93	100
	Architectural Coating	35	12	18.5	7,770	25.93	300
<b>TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION:</b>							<b>69,748</b>

(UC, 2024c, Table 4-7)



**Table 4.4-7 Construction Vendor Fuel Consumption Estimates**

Year	Construction Activity	Duration (Days)	Vendor Trips/Day	Trip Length (miles)	VTM	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2024	MHD						
	Site Preparation	20	2	10.2	408	8.32	49
	Grading	45	4	10.2	1,836	8.32	221
	Building Construction	67	40	10.2	27,336	8.32	3,287
	HHD (Vendor)						
	Site Preparation	20	2	10.2	408	6.03	68
	Grading	45	4	10.2	1,836	6.03	305
	Building Construction	67	40	10.2	27,336	6.03	4,537
2025	MHD						
	Building Construction	261	40	10.2	106,488	8.43	12,627
	HHD (Vendor)						
	Building Construction	261	40	10.2	106,488	6.13	17,372
2026	MHD						
	Building Construction	112	40	10.2	45,696	8.59	5,321
	HHD (Vendor)						
	Building Construction	112	40	10.2	45,696	6.24	7,323
<b>TOTAL CONSTRUCTION VENDOR FUEL CONSUMPTION:</b>							<b>51,110</b>

(UC, 2024c, Table 4-8)

## 7. Construction Energy Efficiency/Conservation Measures

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel. (UC, 2024c, p. 31)

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption. (UC, 2024c, p. 31)



Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling.” In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints. (UC, 2024c, p. 31)

In general, construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations. (UC, 2024c, p. 32)

### **C. Operational Energy Demands**

Energy consumption in support of or related to Project operations would include transportation fuel demands (fuel consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and facilities energy demands (energy consumed by building operations and site maintenance activities). (UC, 2024c, p. 32)

#### **1. Transportation Fuel Demands**

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluating the vehicle fleet mix and the total VMT. (UC, 2024c, p. 32)

As with worker and vendors trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB. EMFAC2021 was run for the San Bernardino (SC) sub-area for the 2024 through 2026 calendar years. Data from EMFAC2021 is shown in Appendix 4.2 of the Project’s EA (*Technical Appendix F*). (UC, 2024c, p. 32)

The estimated transportation energy demands were previously summarized in Table 4.4-8, *Total Project-Generated Traffic Annual Fuel Consumption*. As summarized in Table 4.4-8, the Project would result in a 3,050,955 annual VMT and an estimated annual fuel consumption of 230,898 gallons of fuel. (UC, 2024c, p. 32)

#### **2. On-site Cargo Handling Equipment Fuel Demands**

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building’s truck court areas. For this particular Project, on-site modeled operational equipment includes up to



three (3) 175 horsepower (hp), diesel gas-powered cargo handling equipment – port tractors operating at 4 hours a day<sup>6</sup> for 365 days of the year.

Project operational activity estimates and associated fuel consumption estimates are based on the annual EMFAC2021 offroad emissions for the 2026 operational year and were used to derive the total annual fuel consumption associated on-site equipment. As presented in Table 4.4-9, *On-Site Cargo Handling Equipment Fuel Consumption Estimates*, Project on-site equipment would consume an estimated 8,175 gallons of diesel. (UC, 2024c, p. 33)

### 3. Facility Energy Demands

#### Energy Demand

Project building operations activities would result in the consumption of electricity, which would be supplied to the Project by SCE. As summarized in Table 4.4-10, *Project Annual Operational Energy Demand Summary*, the Project would result in 995,157 kWh/year of electricity. Based on information provided by the Project Applicant, the Project would not use natural gas for the building envelope. As such, the Project would not result in a demand for natural gas and therefore has no potential to result in the inefficient, wasteful, or unnecessary consumption of natural gas resources.

**Table 4.4-8 Total Project-Generated Traffic Annual Fuel Consumption**

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	33.47	979,770	29,269
LDT1	25.64	77,311	3,015
LDT2	25.93	408,442	15,750
MDV	21.11	300,768	14,250
MCY	42.30	41,102	972
LHDT1	16.62	160,532	9,659
LHDT2	15.58	43,635	2,801
MHDT	8.59	259,849	30,260
HHDT	6.24	779,546	124,923
<b>TOTAL (ALL VEHICLES):</b>		<b>3,050,955</b>	<b>230,898</b>

(UC, 2024c, Table 4-9)

### 4. Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions

<sup>6</sup> Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.



standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code). (UC, 2024c, p. 35)

**Table 4.4-9 On-Site Cargo Handling Equipment Fuel Consumption Estimates**

Equipment	Quantity	Usage Hours	Days of Operation	EMFAC2021 Fuel Consumption (gal./yr)	EMFAC2021 Activity (hrs./yr)	Total Fuel Consumption
Cargo Handling Equipment	3	4	365	182	97	8,175
<b>ON-SITE CARGO HANDLING EQUIPMENT FUEL DEMAND (GALLONS FUEL):</b>						8,175

(UC, 2024c, Table 4-10)

**Table 4.4-10 Project Annual Operational Energy Demand Summary**

Land Use	Electricity Demand (kWh/year)
High-Cube Transload Warehouse	858,168
Parking Lot	136,989
<b>TOTAL PROJECT ENERGY DEMAND</b>	995,157

kWh – Kilo Watt Hours

(UC, 2024c, Table 4-11)

Furthermore, in accordance with Mitigation Measure 4.6-3, the Project Applicant would be required to accommodate a 250-kw solar system on the proposed warehouse building, which is anticipated to generate up to 365,000 kWh/annually. Additionally, pursuant to Mitigation Measure MM 4.6-1 in EIR Subsection 4.6, *Greenhouse Gas Emissions*, the Project would be required to ensure that all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) and all indoor cargo handling equipment shall be required to be powered by electricity. Pursuant to EIR Mitigation Measure MM 4.6-2, the Project also would be required to ensure that the Project would include low-flow and high-efficiency fixtures including toilets, urinals and faucets which use less water. Implementation of these measures would serve to reduce the Project's operational energy demand summary from 995,157 kWh/year to 873,401 kWh/year, as shown in Table 4.4-11, *Project Annual Operational Energy Demand Summary – With Project Design Features and Mitigation Measures*.

Project annual fuel consumption estimates presented previously in Table 4.4-8 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system. (UC, 2024c, p. 35)



**Table 4.4-11 Project Annual Operational Energy Demand Summary – With Project Design Features and Mitigation Measures**

Land Use	Electricity Demand (kWh/year)
High-Cube Transload Warehouse	736,412
Parking Lot	136,989
<b><i>TOTAL PROJECT ENERGY DEMAND</i></b>	<b><i>873,401<sup>a</sup></i></b>

kWh - Kilo Watt Hours

<sup>a</sup> Although the Project would generate 365,000 kWh/yr of solar PV, the total electricity in demand would not total this reduction as explained in CalEEMod Measure E-10-B which states that the variable reduction in energy use is dependent on building energy consumption and has limitations.

(UC, 2024c, Table 4-11)

Additionally, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. (UC, 2024c, p. 35)

#### **D. Conclusion**

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems.

Future building permit applications associated with the Project would trigger mandatory compliance with the applicable CALGreen Title 24 Energy Efficiency standards in effect at the time the building permit application is filed. As such, energy consumed by the Project's building operation systems (lighting, HVAC, etc.) is reasonably expected to be comparable in efficiency to energy consumed by other warehouse uses of similar scale and intensity that are constructed in California pursuant to the same mandatory CALGreen requirements. The stringency of CALGreen requirements related to energy conservation has steadily increased over time, and older buildings constructed in accordance with older versions of CALGreen, or before CALGreen was adopted, are generally more energy intensive than newer buildings, and particularly the proposed Project's building that would be constructed in accordance with the most current requirements, and requirements that were not in effect at the time other, older existing warehouse buildings were constructed, thereby indicating that the Project's building operation energy demands in terms of efficiency would be comparable to, if not lower than, other existing operating warehouse buildings within the region.

The Project also would reduce its fossil fuel energy demands by accommodating a 250-kw solar system on the roof of the proposed warehouse building, per Project Design Feature (PDF) 4.6-1, and through compliance with Mitigation Measures MM 4.6-1 and MM 4.6-2 that address the Project's potential impacts due to greenhouse gas (GHG) emissions. MM 4.6-1 requires that all on-site equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) be powered by electricity (a portion of



which would be generated by the rooftop solar system). MM 4.6-2 requires the installation of low-flow water and high-efficiency fixtures that perform better than the minimum efficiency standards established by ENERGY STAR. Additionally, trip generation and VMT that are reasonably assumed to be generated by the Project are based on trip rates for high-cube transload and short-term warehouse uses published by the Institute of Transportation Engineers (ITE). ITE trip generation rates are routinely used for CEQA analysis purposes across California and the nation, and thus the Project's trip generation estimate, and associated energy use to power vehicles, is consistent with other high-cube transload and short-term warehouse uses of similar scale and configuration. On these basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. The Project would not cause or result in the need for additional energy producing or transmission facilities, other than the off-site extension of an underground electrical line that would run along Sterling Avenue north of the Project Site for approximately 0.64-mile to a connection point for electrical service. The installation of this off-site line is analyzed throughout this EIR. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Therefore, the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

***Threshold b.: Would the Project conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?***

A summary of the Project's consistency with applicable regulations and requirements is provided below.

***Consistency with 2022 Integrative Energy Policy Report (IEPR)***

Electricity would be provided to the Project site by SCE. SCE's Clean Power and Electrification Pathway (CPEP) white paper builds on existing state programs and policies. The 2022 IEPR discusses the CEC's equity and environmental justice efforts, its development of a more easily navigable online data platform via the California Energy Planning Library, and an update to the California Energy Demand Forecast. The report also provides information on emerging topics related to energy reliability, western electricity integration, hydrogen, gasoline prices, gas transition, and distributed energy resources. As the Project is designed in compliance with applicable regulations, the Project is consistent with and would not conflict with or obstruct implementation of the 2022 IEPR. Additionally, the Project would comply with the applicable Title 24 standards and would accommodate a 250-kw solar system on the proposed warehouse building, which further would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the proposed Project would support the goals presented in the 2022 IEPR.

***Consistency with California Code Title 24, Part 6, Energy Efficiency Standards***

The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The proposed Project would be required to comply with the Title 24 standards in place at the time plan check submittals are made. Therefore, the Project would not result in a significant impact on energy resources. As such, the Project would not conflict with or obstruct implementation of the 2022 Title 24 standards.



### ***Consistency with AB 1493***

AB 1493 is not applicable to the Project as it is a Statewide measure establishing vehicle emissions standards. No feature of the Project would interfere with implementation of the requirements under AB 1493.

### ***Consistency with Renewable Portfolio Standard (RPS)***

California's Renewable Portfolio Standard is not applicable to the Project as it is a Statewide measure that establishes a renewable energy mix. No feature of the Project would interfere with implementation of the requirements under RPS.

### ***Consistency with SB 350***

The proposed Project would use energy from SCE, which has committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. No feature of the Project would interfere with implementation of SB 350. Additionally, the Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption, including the provision of a 250-kw solar system on the proposed warehouse building.

Consistency with the City of San Bernardino General PlanThe Project is required to be designed in accordance with the codified regulations set forth by the City of San Bernardino, which serve to implement the overarching applicable goals and policies of the General Plan. Implementation of Mitigation Measures MM 4.6-1 and MM 4.6-2 and Project Design Feature PDF 4.6-1 that address the topic of greenhouse gas emissions would ensure that all on-site equipment would be powered by electricity; charging stations for on-site equipment would be provided; low flow and high efficiency fixtures would be utilized; and that the proposed building would include a 250-kw solar system.

### ***Conclusion***

As indicated in the preceding analysis, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, there would be no significant impacts.

## **4.4.5 CUMULATIVE IMPACT ANALYSIS**

As indicated under the analysis of Threshold a., there are no components of the proposed Project that would result in the wasteful, inefficient, or unnecessary consumption of energy resources. Although it is possible other cumulative developments could result in the wasteful, inefficient, or unnecessary consumption of energy resources, the Project's projected energy demand during construction and long-term operations would be less-than-cumulatively considerable with mandatory compliance with applicable regulations.

As indicated under the analysis of Threshold b., the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. As such, the Project has no potential to result in cumulatively-considerable impacts due to a conflict with or obstruction of such plans.



#### 4.4.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a.: Less-than-Significant Impact. Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. As such, Project impacts due to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant requiring no mitigation.

Threshold b.: Less-than-Significant Impact. Energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other warehouse projects of similar scale and intensity that are operating in California, as the Project would be subject to current regulatory requirements. Based on the analysis presented herein, the Project would not conflict with or obstruct a federal or State plan for renewable energy or energy efficiency, and impacts would be less than significant.

#### 4.4.7 CITY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

##### ***Applicable City Regulations and Design Requirements***

The following are CRDRs that apply to the proposed Project and that reduce or preclude energy consumption. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements.

CRDR 4.4-1 The Project shall comply with applicable provisions of the following State and federal laws:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards
- California Code Title 24, Part 11, California Green Building Standards Code (CALGreen)
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

##### ***Mitigation***

Project impacts due to energy consumption would be less than significant; therefore, mitigation measures are not required.



## 4.5 GEOLOGY AND SOILS

The analysis in this Subsection is primarily based on two site-specific technical reports prepared by Southern California Geotechnical (hereinafter, “SoCalGeo”) titled, 1) “Geotechnical Investigation, Proposed Industrial Building SEC 6<sup>th</sup> Street at Sterling Avenue, San Bernardino, California” and dated February 16, 2024 (SoCalGeo, 2024a); and 2) “Results of Infiltration Testing, Proposed Industrial Building SEC 6<sup>th</sup> Street at Sterling Avenue, San Bernardino, California” and dated February 16, 2024 (SoCalGeo, 2024b). The reports are included as *Technical Appendix G1 and G2*, respectively, to this EIR. All references used in this Subsection are listed in EIR Section 7.0, *References*.

Based on analyses conducted as part of the Project’s Initial Study, and the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), the City determined that the Project would clearly result in no impacts or less-than-significant impacts under several of the thresholds identified in Section VII (Geology and Soils) of Appendix G to the CEQA Guidelines. Specifically, the Project’s Initial Study concluded that the Project would result in no impacts or less-than-significant impacts under the following thresholds of significance:

- a.(i) 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, 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.*
- a.(ii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: strong seismic ground shaking?*
- a.(iv) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: landslides?*
- b. Would the Project result in substantial soil erosion or the loss of topsoil?*
- d. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*
- e. 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?*
- f. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Accordingly, no additional analysis of the above-listed thresholds are required. Refer to the Project’s Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.6 for a discussion and analysis of the above-listed thresholds not analyzed in this subsection.

This Subsection focuses on the Project’s potential to adversely affect the remaining thresholds of significance under Section VII (Geology and Soils) of Appendix G to the CEQA Guidelines:



- a.(iii) *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- c. *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?*

#### 4.5.1 EXISTING CONDITIONS

##### A. Soil

Two (2) types of soil conditions were encountered on the Project Site during a soils and geotechnical investigation performed by SoCalGeo: artificial fill, and natural soil. The characteristics of the soil conditions encountered on the Project site are summarized below.

##### 1. *Artificial Fill*

Artificial fill soils were encountered during geological field investigations across the Project Site to depths ranging from 2 to 5.5 feet below the ground surface. The fill soils generally consist of very loose to medium dense silty sands, sandy silts, and sands with varying amounts of silt and fine gravel. The fill soils possess a disturbed and mottled appearance resulting in the classification of artificial fill. (SoCalGeo, 2024a, p. 5)

##### 2. *Native Alluvial Soil*

Native alluvial soils were encountered beneath the artificial fill soils, extending to at least the maximum depth explored of  $\pm 50$  feet below existing site grades. The near surface alluvium generally consists of medium dense to very dense silty sands, sandy silts, and poorly- to well-graded sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to depths of  $\pm 12$  to  $\pm 25$  feet below existing site grades. Deeper alluvial soils consist of dense to very dense silty sands, sandy silts and poorly-graded sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to the maximum depth explored of  $50 \pm$  feet below the site grades. (SoCalGeo, 2024a, p. 6)

##### B. Groundwater

Water was encountered during the drilling by SoCalGeo at  $\pm 37$  feet below existing site grades at one of the boring locations in the northern portion of the Project Site. Delayed groundwater level readings were taken at the same boring location approximately two hours after the completion of drilling and the water still measured at a depth  $\pm 37$  feet. The remaining boreholes were dry at the completion of drilling. Very moist samples were encountered at a boring location in the northwest portion of the Project Site, at a depth of  $\pm 42$  feet and extending to the maximum depth explored of  $\pm 50$  feet. Based on the water level measurements and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth of  $\pm 37$  feet below existing site grades, at the time of the subsurface investigation. (SoCalGeo, 2024a, p. 6)

##### C. Seismic Hazards

The Project Site is located in an area of southern California that is subject to strong ground motions due to seismic events (i.e., earthquakes). The geologic structure of southern California is dominated mainly by



northwest-trending faults associated with the San Andreas system. The nearest active fault to the Project Site is the San Andreas Fault (South Branch), located approximately 2.4 miles northeast of the Project Site (CGS, 2022a). An active fault is defined by the California Geological Survey as a fault that has experienced surface displacement within the Holocene Epoch (roughly the last 11,000 years).

Secondary hazards associated with earthquakes include surface rupture, ground failure, unstable soils and slopes. Each of these hazards is briefly described below.

**1. *Fault Rupture***

Fault rupture can occur along pre-existing, known active fault traces; however, fault rupture also can splay from known active faults or rupture along unidentified fault traces. There are no active or potentially active faults occurring on the Project Site and no known faults are mapped trending through or toward the Site. Therefore, SoCalGeo considered the potential for fault rupture on the Project Site to be low (SoCalGeo, 2024a, p. 9).

**2. *Liquefaction***

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions, which causes the soil to behave as a viscous liquid. Liquefaction is generally limited to the upper 50 feet of subsurface soils. Research and historical data indicate that loose granular soils of Holocene to late Pleistocene age below a near-surface groundwater table are most susceptible to liquefaction, while the stability of most clayey material is not adversely affected by vibratory motion. (SCEC, 1999, pp. 5-6) Based on mapping conducted by the County of San Bernardino, the Project Site is located within a zone with liquefaction susceptibility (SoCalGeo, 2024a, p. 12).

**3. *Unstable Soils and Slopes***

The Project Site is generally flat and does not contain steep natural or manufactured slopes and there is no evidence of historical landslides or rockfalls on the Site (Google Earth, 2023). As such, the Project Site does not have any history of unstable soils or slopes and is not susceptible to seismically-induced landslides and rockfalls.

**D. *Slope and Instability Hazards***

**1. *Soil Erosion***

Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Additionally, the slope gradient on which a given soil is located also contributes to the soil's resistance to erosive forces. Because water is able to flow faster down steeper gradients, the steeper the slope on which a given soil is located, the more readily it will erode. According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), soils on the Project Site have a "slight" susceptibility to water erosion hazard (NRCS, n.d.).



Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. It mostly affects dry, sandy soils in flat, bare areas, but wind erosion may occur wherever soil is loose, dry, and finely granulated. According to the USDA NRCS, soils on the Project Site and in the surrounding area have a “moderate” to “high” susceptibility to wind erosion hazards (NRCS, n.d.). Under existing conditions, the portions of the Project Site that are undeveloped with little or no vegetative cover have the potential to contribute windblown soil and sand.

## **2. *Settlement Potential***

Settlement refers to unequal compression of a soil foundation, shrinkage, or undue loads being applied to a building after its initial construction that affect the soil foundation. According to SoCalGeo, the soils on the Project Site have settlement potential (SoCalGeo, 2024a, p. 13).

## **3. *Shrinkage/Subsidence Potential***

Subsidence is a gradual settling or sudden sinking of the ground surface (i.e., loss of elevation). The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Shrinkage is the reduction in volume in soil as the water content of the soil drops (i.e., loss of volume). Testing conducted by SoCalGeo on the soils collected from the Project Site indicate that shrinkage would be on the order of 5 to 15 percent due to excavation and recompaction, and subsidence would be minor (approximately 0.1 feet) due to earthwork operations (SoCalGeo, 2024a, p. 15).

## **4. *Landslide Potential***

The Project Site is generally flat and does not contain steep natural or manufactured slopes (Google Earth, 2023). As such, there is no potential for landslides to occur on or immediately adjacent to the Site.

## **E. *Paleontological Setting***

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under State, county, and local guidelines.

The Project Site contains artificial fill at depths of approximately 2.0 to 5.5 feet and alluvium to depths extending to 50+ feet below ground surface. The near surface Quaternary (Pleistocene to Holocene) younger alluvial fan deposits consists of medium dense to very dense silty sands, sandy silts, and poorly- to well-graded sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to depths of 12 to 25± feet below existing site grades. The artificial fill and younger alluvium have a low paleontological sensitivity and no reasonable potential to yield significant paleontological resources.



#### 4.5.2 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations governing issues related to geology, soils, and paleontological resources.

##### **A. Federal Plans, Policies, and Regulations**

###### ***1. Clean Water Act***

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. “Clean Water Act” became the Act’s common name with the amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. 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. (EPA, 2023e)

##### **B. State Plans, Policies, and Regulations**

###### ***1. Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)***

The Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The A-P Act’s main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. (CA Legislative Info, n.d.)

The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. ["Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994.] The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Single family wood-frame and steel-frame dwellings up to two stories not part of a development of four units or more are exempt. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet). (CA Legislative Info, n.d.)



There are no active faults on the Project Site and the Project Site is not located within any Alquist-Priolo Earthquake Fault Zone (SoCalGeo, 2024a, p. 9).

## **2. *Seismic Hazards Mapping Act***

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, § 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. (CDC, n.d.)

Staff geologists in the Seismic Hazards Program gather existing geological, geophysical, and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret these data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation (ZORI) those areas prone to liquefaction and earthquake-induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. (CDC, n.d.)

The SHMA requires site-specific geotechnical investigations be conducted within the ZORI to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. (CDC, n.d.) The Project Site is not located within a ZORI.

## **3. *Natural Hazards Disclosure Act***

The Natural Hazards Disclosure Act, effective June 1, 1998 (as amended June 9, 1998), requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. (CA Legislative Info, n.d.)

The law requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). These maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling construction and development. Single-family frame dwellings up to two stories not part of a development of four or more units are exempt from the state requirements. However, local agencies can be more restrictive than state law requires. (CA Legislative Info, n.d.)

Before a development permit can be issued or a subdivision approved, cities and counties must require a site-specific investigation to determine whether a significant hazard exists at the site and, if so, recommend measures to reduce the risk to an acceptable level. The investigation must be performed by state-licensed engineering geologists and/or civil engineers. (CA Legislative Info, n.d.)



#### 4. *California Building Standards Code (Title 24)*

California Code of Regulations (CCR) Title 24 is reserved for 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 § 18909). Health and Safety Code (state law) § 18902 gives CCR Title 24 the name California Building Standards Code (CBSC). (BSC, 2022, p. 1)

The CBSC in CCR Title 24 is published by the California Building Standards Commission and it applies to all building occupancies (see Health and Safety Code §§ 18908 and 18938) throughout the State of California. Cities and counties are required by state law to enforce CCR Title 24 (reference Health and Safety Code §§ 17958, 17960, 18938(b), and 18948). Cities and counties may adopt ordinances making more restrictive requirements than provided by CCR Title 24, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission (Reference Health and Safety Code §§ 17958.7 and 18941.5). (BSC, 2022, p. 1)

#### A. *Local Plans, Policies, and Regulations*

##### 1. *City of San Bernardino General Plan*

The City of San Bernardino General Plan Safety Element assesses natural and man-made hazards present in the community and includes policies to address those hazards. The following Safety Element policies and programs for geologic/seismic hazards intended to reduce death, injuries, damage to property, and economic and social dislocation due to seismic events, as well as to enhance preparedness to survive, respond to, and recover from a major earthquake or geologic disaster have been identified as applicable to the Project (City of San Bernardino, 2005a, Chapter 10):

#### **Goal 10.5:** Reduce urban run-off from new and existing development.

- Policy 10.5.1: Ensure compliance with the Federal Clean Water Act requirements for National Pollutant Discharge Elimination System (NPDES) permits, including developing and requiring the development of Water Quality Management Plans for all new development and significant redevelopment in the City.
- Policy 10.5.4: Require new development and significant redevelopment to utilize site preparation, grading and foundation designs that provide erosion control to prevent sedimentation and contamination of waterways.
- Policy 10.5.5: Ensure compliance with the requirements for Storm Water Pollution Prevention Plans or Water Quality Management Plans for all new development or construction activities.

#### **Goal 10.7:** Protect life, essential lifelines, and property from damage resulting from seismic activity.

- Policy 10.7.3: Enforce the requirements of the California Seismic Hazards Mapping and Alquist-Priolo Earthquake Fault Zoning Acts when siting, evaluating, and constructing new projects within the City.
- Policy 10.7.4: Determine the liquefaction potential at a site prior to development, and require that specific measures be taken, as necessary, to prevent or reduce damage in an earthquake.



**Goal 10.9:** Minimize exposure to risks from geologic activities.

- Policy 10.9.2: Require geologic and geotechnical investigations in areas of potential geologic hazards as part of environmental and/or development review process for all new structures.
- Policy 10.9.3: Require that new construction and significant alterations to structures located within potential landslide areas be evaluated for site stability, including potential impact to other properties during project design and review.

## **2. City of San Bernardino Local Hazard Mitigation Plan**

The City of San Bernardino's *Local Hazard Mitigation Plan* (LHMP) is a plan that the City reviews, monitors, and updates approximately every five years to reflect changing conditions and new information. The LHMP presents information regarding hazards within the City and mitigation measures to reduce consequences of hazards. The purpose of the LHMP is to analyze potential hazards and provide a plan to reduce and/or eliminate risk in the City by developing more resilient communities. The current version of the LHMP is dated May 1, 2016; however, the City is currently in the process of updating the LHMP. The LHMP addresses hazards associated with flood, wildfires, earthquakes and geologic hazards, and other lower probability hazards. (City of San Bernardino, 2016)

## **3. City of San Bernardino Municipal Code**

The City of San Bernardino Municipal Code, Title 15, *Buildings and Construction*, is based on the California Building Code as is supplemented with local amendments. The Building Code regulates the construction, change of occupancy, alteration, repair, removal and maintenance of any building or structure in the City as well as any grading or alteration of land. Chapter 15.08 provides policies for the protection of the community against geologic and seismic hazards, including fault rupture and ground shaking which could cause liquefaction. (City of San Bernardino, 2023)

## **4. SCAQMD Rule 403 (Fugitive Dust)**

SCAQMD Rule 403 (Fugitive Dust) requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust. The purpose of this Rule is to minimize the amount of particulate matter in the ambient air as a result of anthropogenic fugitive dust sources. (SCAQMD, 2005)

### **4.5.3 METHODOLOGY FOR EVALUATING GEOLOGY & SOILS IMPACTS**

The analysis of potential geology and soils-related impacts is based upon geotechnical investigations prepared specifically for the Project Site. The geotechnical investigation included a site reconnaissance, review of published reports, maps, and aerial photographs, geotechnical field exploration, laboratory testing, engineering analysis, and soil borings. The City's General Plan and information sources from State and federal agencies were researched to establish the Project Site's existing conditions and likelihood of environmental effects.



#### 4.5.4 BASIS FOR DETERMINING SIGNIFICANCE

Section VI of Appendix G to the CEQA Guidelines addresses typical adverse effects due to geological conditions, and includes the following threshold questions to evaluate the Project's impacts resulting from geologic or soil conditions (OPR, 2019) that will be analyzed below:

- a. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*
  - iii. *Seismic-related ground failure, including liquefaction*
- c. *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?*

#### 4.5.5 IMPACT ANALYSIS

***Threshold a(iii).: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: seismic-related ground failure, including liquefaction?***

A liquefaction analysis was conducted by SoCalGeo because the San Bernardino County Land Use Plan, Geologic Hazard Overlays, San Bernardino South Quadrangle, FH30 C, indicates that the subject site is located within a zone of liquefaction susceptibility. The historic high groundwater depth indicated groundwater levels ranging from 37 to  $\pm 45$  feet. For the purposes of analysis, the historic high groundwater table of 37 feet below grade was used. SoCalGeo identified a potentially liquefiable soil layer in Boring No. B-1, located in the northwest corner of the Project Site. A settlement analysis was conducted for the potentially liquefiable layer and it was determined that Boring No. 1 had a settlement potential of  $\pm 0.39$  inches. Based on this settlement, differential settlements of up to  $\pm \frac{1}{4}$  inch could be expected to occur during a liquefaction inducing seismic event and could occur across a distance of 50 feet, indicating a maximum angular distortion of less than 0.001 inches per inch. Based on this evaluation of settlement potential, no design considerations related to liquefaction are warranted for the Project. Accordingly, impacts would be less-than-significant. (SoCalGeo, 2024a, pp. 12-13)

Regarding the potential for other types of seismic-related ground failures, artificial fill soils were encountered at all of the boring locations, extending from the ground surface to depths of approximately 2.0 to 5.5 feet. These soils, in their present condition, are not considered suitable for support of the foundation loads of the proposed warehouse structure.

The Project would be required to be designed and constructed in accordance with applicable seismic safety guidelines, including the standard requirements of the CBSC and the City of San Bernardino Municipal Code, Title 15, as noted above. Furthermore, and pursuant to the requirements of San Bernardino Municipal Code, the Project would be required to comply with the grading and construction recommendations contained within the geotechnical report for the Project Site to further reduce the risk of seismic-related ground failure due to liquefaction. However, a significant impact could occur if the Project did not comply with the site-specific



recommendations of the Project's geotechnical report (*Technical Appendix G1*). The Project's geotechnical report includes the following recommendations that would reduce seismic risk to and "acceptable level" as defined by the California Code of Regulations:

- Treatment of Existing Soils – Building Pad: Remedial grading should be performed within the proposed building area in order to remove the existing undocumented fill soils. The existing soils within the proposed building area should be overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed building pad subgrade elevation, whichever is greater.

Where not encompassed within the general building pad overexcavations, additional overexcavation should be performed within the influence zones of the new foundations, to provide for a new layer of compacted structural fill extending to a depth of 3 feet below proposed bearing grade.

The overexcavation areas should extend at least 5 feet beyond the building perimeter and foundations, and to an extent equal to the depth of fill below the new foundations. If the proposed structure incorporates any exterior columns (such as for a canopy or overhang) the overexcavation should also encompass these areas.

Slightly deeper areas of overexcavation will also be required in the area of Boring Nos. B-5 and B-7 where loose and potentially collapsible soils extend to depths of 6½ to 8± feet (refer to Appendix A to the Project's Geotechnical Study for boring locations, included as *Technical Appendix G1*). Additional evaluation of the exposed overexcavation subgrade soils by the geotechnical engineer will be required in this area of the site to verify that the full extent of loose and potentially collapsible soils, as encountered at Boring Nos. B-5 and B-7, are removed.

Following completion of the overexcavation, the subgrade soils within the building area should be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. This evaluation should include proofrolling and probing to identify any soft, loose, or otherwise unstable soils that must be removed. Some localized areas of deeper excavation may be required if additional fill materials or loose, porous, or low density native soils are encountered at the base of the overexcavation.

After a suitable overexcavation subgrade has been achieved, the exposed soils should be scarified to a depth of at least 12 inches, and thoroughly watered to raise the moisture content of the underlying soils to at least 0 to 4 percent above optimum moisture content, extending to a depth of at least 24 inches. The moisture conditioning of the overexcavation subgrade soils should be verified by the geotechnical engineer. The subgrade soils should then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The previously excavated soils may then be replaced as compacted structural fill.

- Treatment of Existing Soils: Retaining Walls and Site Wall: The existing soils within the areas of proposed retaining and non-retaining site walls should be overexcavated to a depth of at least 3 feet



below foundation bearing grade and replaced as compacted structural fill with the same requirements as the proposed building pad or as approved by a geotechnical engineer. Any undocumented fill soils within any of these foundation areas should be removed in their entirety. The overexcavation subgrade soils should be evaluated by the geotechnical engineer prior to scarifying, moisture conditioning, and recompacting the upper 12 inches of exposed subgrade soils, as discussed for the building areas. The previously excavated soils may then be replaced as compacted structural fill.

- Treatment of Existing Soils: Parking, Drive and Flatwork Areas: Overexcavation of the existing soils in the new parking, drive, and flatwork areas are not considered warranted, with the exception of areas where lower strength or unstable soils are identified by the geotechnical engineer during grading. Subgrade preparation in the new parking, drive, and flatwork areas should initially consist of removal of all soils disturbed during stripping operations. The geotechnical engineer should then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils should then be scarified to a depth of at least 12± inches, moisture conditioned to 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.
- Fill Placement
  - Fill soils should be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 0 to 4 percent above the optimum moisture content, and compacted.
  - On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer.
  - All grading and fill placement activities should be completed in accordance with the requirements of the 2022 California Building Code (CBC) and the grading code of the City of San Bernardino.
  - All fill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Fill soils should be well mixed.
  - Compaction tests should be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore should not relieve the contractor of his responsibility to meet the job specifications.
- Selective Grading and Oversized Material Placement: All materials greater than 6 inches in size be excluded from the upper 1 foot of the surface of any compacted fills. The placement of any oversized materials should be performed in accordance with the Grading Guide Specifications included in Appendix D of the Project's geotechnical report.
- Imported Structural Fill: All imported structural fill should consist of very low expansive ( $EI < 20$ ), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D of the Project's geotechnical report.



- Utility Trench Backfill: In general, all utility trench backfill soils should be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. As an alternative, a clean sand (minimum Sand Equivalent of 30) may be placed within trenches and compacted in place. It is recommended that materials in excess of 3 inches in size not be used for utility trench backfill. Compacted trench backfill should conform to the requirements of the local grading code. All utility trench backfills should be witnessed by the geotechnical engineer. The trench backfill soils should be compaction tested where possible; probed and visually evaluated elsewhere.

Accordingly, prior to implementing the geotechnical report recommendations, the Project has the potential to directly or indirectly cause substantial adverse effects, including risk of loss, injury, or death as a result of seismic-related ground failure. This is evaluated as a significant impact for which mitigation is required.

***Threshold c.: 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?***

The Project Site is relatively flat and the Project does not propose the construction of any manufactured slopes (Google Earth, 2023). Accordingly, the Project would result in less-than-significant impacts associated with landslide hazards.

SoCalGeo determined that the removal and re-compaction of existing Project Site soils to an average 92 percent compaction would result in an average shrinkage of 5 to 15 percent; however, potential shrinkage for individual samples ranged between 1 and 18 percent. The Project Site has undocumented fill, which is a potential source of lateral spreading or collapse. Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. Subsidence is estimated to be 0.1 feet. (SoCalGeo, 2024a, p. 15) The artificial fill soils, in their present condition, that were encountered at all of the boring locations, extending from the ground surface to depths of approximately 2.0 to 5.5 feet are not considered suitable for support of the foundation loads of the proposed Project's warehouse structure. The Project would be required to comply with the site preparation, building foundation, building floor slab, and pavement recommendations contained within the Project's geotechnical report which would ensure measures are implemented to address potential impacts associated with soil shrinkage/subsidence:

- Treatment of Existing Soils – Building Pad: Remedial grading should be performed within the proposed building area in order to remove the existing undocumented fill soils. The existing soils within the proposed building area should be overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed building pad subgrade elevation, whichever is greater.

Where not encompassed within the general building pad overexcavations, additional overexcavation should be performed within the influence zones of the new foundations, to provide for a new layer of compacted structural fill extending to a depth of 3 feet below proposed bearing grade.



The overexcavation areas should extend at least 5 feet beyond the building perimeter and foundations, and to an extent equal to the depth of fill below the new foundations. If the proposed structure incorporates any exterior columns (such as for a canopy or overhang) the overexcavation should also encompass these areas.

Slightly deeper areas of overexcavation will also be required in the area of Boring Nos. B-5 and B-7 where loose and potentially collapsible soils extend to depths of 6½ to 8± feet (refer to Appendix A to the Project's Geotechnical Study for boring locations, included as *Technical Appendix G1*). Additional evaluation of the exposed overexcavation subgrade soils by the geotechnical engineer will be required in this area of the site to verify that the full extent of loose and potentially collapsible soils, as encountered at Boring Nos. B-5 and B-7, are removed.

Following completion of the overexcavation, the subgrade soils within the building area should be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. This evaluation should include proofrolling and probing to identify any soft, loose, or otherwise unstable soils that must be removed. Some localized areas of deeper excavation may be required if additional fill materials or loose, porous, or low density native soils are encountered at the base of the overexcavation.

After a suitable overexcavation subgrade has been achieved, the exposed soils should be scarified to a depth of at least 12 inches, and thoroughly watered to raise the moisture content of the underlying soils to at least 0 to 4 percent above optimum moisture content, extending to a depth of at least 24 inches. The moisture conditioning of the overexcavation subgrade soils should be verified by the geotechnical engineer. The subgrade soils should then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The previously excavated soils may then be replaced as compacted structural fill.

- Treatment of Existing Soils: Retaining Walls and Site Wall: The existing soils within the areas of proposed retaining and non-retaining site walls should be overexcavated to a depth of at least 3 feet below foundation bearing grade and replaced as compacted structural fill with the same requirements as the proposed building pad or as approved by a geotechnical engineer. Any undocumented fill soils within any of these foundation areas should be removed in their entirety. The overexcavation subgrade soils should be evaluated by the geotechnical engineer prior to scarifying, moisture conditioning, and recompacting the upper 12 inches of exposed subgrade soils, as discussed for the building areas. The previously excavated soils may then be replaced as compacted structural fill.
- Treatment of Existing Soils: Parking, Drive and Flatwork Areas: Overexcavation of the existing soils in the new parking, drive, and flatwork areas are not considered warranted, with the exception of areas where lower strength or unstable soils are identified by the geotechnical engineer during grading. Subgrade preparation in the new parking, drive, and flatwork areas should initially consist of removal of all soils disturbed during stripping operations. The geotechnical engineer should then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils should then be scarified



to a depth of at least 12± inches, moisture conditioned to 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

- Imported Structural Fill: All imported structural fill should consist of very low expansive ( $EI < 20$ ), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve). Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D of the Project's geotechnical report.

However, a significant impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical report (*Technical Appendix G1*). Accordingly, prior to implementing the geotechnical report recommendations, the Project has the potential to be located on a geologic unit or soil that is unstable or has the potential to become unstable. This is evaluated as a significant impact for which mitigation is required.

Lateral spreading is primarily associated with liquefaction hazards. As noted above under the response to Threshold "a(iii)," no design considerations related to liquefaction are warranted for the Project based on topography and soil characteristics. Thus, it was determined that the potential for lateral spreading is low. Accordingly, impacts associated with lateral spreading would be less-than-significant. (SoCalGeo, 2024a, p. 9)

#### 4.5.6 CUMULATIVE IMPACT ANALYSIS

With the exception of erosion hazards, potential hazardous effects related to geologic and soil conditions addressed under Thresholds "a(iii)," and "c" are unique to the Project Site, and inherently restricted to the specific property proposed for development. That is, issues including liquefaction, landslides, and expansive soils would involve effects to (and not from) a proposed development project, are specific to conditions on the subject property, and are not influenced or exacerbated by the geologic and/or soils hazards that may occur on other, off-site properties. Although the Project was determined to have significant direct impacts due to seismic-related ground failure and soil shrinkage/subsidence, because of the site-specific nature of these potential hazards, there would be no cumulative effects to or from other properties.

#### 4.5.7 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a(iii): Significant Direct Impact. Due to the presence of artificial fill soils on the Project Site, the Project would have the potential to be impacted by seismic-related ground failure. Thus, a significant direct impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical report (*Technical Appendix G1*).

Threshold c: Significant Direct Impact. Due to the presence of artificial fill soils on the Project Site, the Project would have the potential to be impacted by soil that is unstable or has the potential to become unstable. Thus, a significant direct impact could occur if the Project did not comply with the site-specific recommendations of the Project's geotechnical report (*Technical Appendix G1*).



#### 4.5.8 MITIGATION

The following mitigation measures would address the Project's potential to result in impacts due to seismic-related ground failure and soil shrinkage/subsidence.

MM 4.5-1 Prior to the issuance of grading permits, the Director of Public Works for the City of San Bernardino (or his/her designee) shall verify that all of the recommendations given in the Project's May 26, 2023 (revised February 16, 2024) "Geotechnical Investigation, Proposed Industrial Building, NEC 5<sup>th</sup> Street and Sterling Avenue, San Bernardino, California," prepared by Southern California Geotechnical, are incorporated into the construction and grading plans. The recommendations shall include, but not be limited to the following:

- Site Stripping and Demolition

Debris resultant from demolition shall be disposed of off-site. Alternatively, concrete and asphalt debris may be crushed to a maximum 1-inch particle size, mixed with the on-site soils, and reused as compacted structural fill. It may also be feasible to process these materials into crushed miscellaneous base (CMB).

Initial site preparation shall include stripping of any topsoil, vegetation, organic debris, and any scattered debris on the site. These materials shall be disposed of off-site. The actual extent of stripping shall be determined in the field by a representative of the geotechnical engineer, based on the organic content and the stability of the encountered materials.

- Treatment of Existing Soils: Building Pad

Remedial grading shall be performed within the proposed building area in order to remove the existing undocumented fill soils. The existing soils within the proposed building area shall be overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed building pad subgrade elevation, whichever is greater. The overexcavation areas shall extend at least 5 feet beyond the building perimeter and foundations, and to an extent equal to the depth of fill below the new foundations. Following completion of the overexcavation, the subgrade soils shall be evaluated by the geotechnical engineer to verify their suitability to serve as the structural fill subgrade, as well as to support the foundation loads of the new structure. After a suitable overexcavation subgrade has been achieved, the exposed soils shall be scarified to a depth of at least 12 inches, and thoroughly watered to raise the moisture content of the underlying soils to at least 0 to 4 percent above optimum moisture content, extending to a depth of at least 24 inches. The moisture conditioning of the overexcavation subgrade soils shall be verified by the geotechnical engineer. The subgrade soils shall then be recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. The previously excavated soils may then be replaced as compacted structural fill.

- Treatment of Existing Soils: Retaining Walls and Site Wall



The existing soils within the areas of proposed retaining and non-retaining site walls shall be overexcavated to a depth of at least 3 feet below foundation bearing grade and replaced as compacted structural fill with the same requirements as the proposed building pad or as approved by a geotechnical engineer. Any undocumented fill soils within any of these foundation areas shall be removed in their entirety.

- Treatment of Existing Soils: Parking, Drive and Flatwork Areas  
Subgrade preparation in the new parking, drive, and flatwork areas shall initially consist of removal of all soils disturbed during stripping operations. The geotechnical engineer shall then evaluate the subgrade to identify any areas of additional unsuitable soils. The subgrade soils shall then be scarified to a depth of at least 12± inches, moisture conditioned to 0 to 4 percent above optimum, and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density. the time of construction.
- Fill Placement
  - Fill soils shall be placed in thin (6± inches), near-horizontal lifts, moisture conditioned to 0 to 4 percent above the optimum moisture content, and compacted.
  - On-site soils may be used for fill provided they are cleaned of any debris to the satisfaction of the geotechnical engineer.
  - All grading and fill placement activities shall be completed in accordance with the requirements of the 2022 CBC and the grading code of the City of San Bernardino.
  - All fill soils shall be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. Fill soils shall be well mixed.
  - Compaction tests shall be performed periodically by the geotechnical engineer as random verification of compaction and moisture content. These tests are intended to aid the contractor. Since the tests are taken at discrete locations and depths, they may not be indicative of the entire fill and therefore shall not relieve the contractor of his responsibility to meet the job specifications.
- Selective Grading and Oversized Material Placement  
Since the proposed grading will require excavation of cobble containing soils, it may be desirable to selectively grade the proposed building pad area. All materials greater than 6 inches in size be excluded from the upper 1 foot of the surface of any compacted fills. The placement of any oversized materials shall be performed in accordance with the Grading Guide Specifications included in Appendix D of the Project's geotechnical report. If disposal of oversized materials is required, rock blankets or windrows shall be used and such areas shall be observed during construction and placement by a representative of the geotechnical engineer.
- Imported Structural Fill  
All imported structural fill shall consist of very low expansive ( $EI < 20$ ), well graded soils possessing at least 10 percent fines (that portion of the sample passing the No. 200 sieve).



Additional specifications for structural fill are presented in the Grading Guide Specifications, included as Appendix D of the Project's geotechnical report.

- Utility Trench Backfill

In general, all utility trench backfill soils shall be compacted to at least 90 percent of the ASTM D-1557 maximum dry density. As an alternative, a clean sand (minimum Sand Equivalent of 30) may be placed within trenches and compacted in place. All utility trench backfills shall be witnessed by the geotechnical engineer. The trench backfill soils shall be compaction tested where possible; probed and visually evaluated elsewhere.

#### 4.5.9 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a(iii): Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.5-1 would ensure that the Project implements the recommendations of the Project's geotechnical report (*Technical Appendix G1*), which would ensure measures are implemented to address potential impacts due to seismic-related ground failure. With implementation of the required mitigation, potential impacts including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, and landslides would be reduced to less-than-significant levels.

Threshold c: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.5-1 would ensure that the Project implements the recommendations of the Project's geotechnical report (*Technical Appendix G1*), which would ensure measures are implemented to address potential impacts associated with soil shrinkage/subsidence. With implementation of the required mitigation, substantial adverse effects associated with soil that is unstable or has the potential to become unstable would be reduced to less-than-significant levels.



## 4.6 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based in part on a greenhouse gas (GHG) analysis prepared for the Project by Urban Crossroads, Inc. (herein, Urban Crossroads), titled, “5<sup>th</sup> & Sterling Greenhouse Gas Analysis” (herein, GHGA), dated February 29, 2024, and included as EIR *Technical Appendix H* (UC, 2024d). Refer to Section 7.0, *References*, for a complete list of reference sources.

This Subsection focuses on the Project’s potential to adversely affect the thresholds of significance under Section VIII (Greenhouse Gas Emissions) of Appendix G to the CEQA Guidelines:

- a. *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*
- b. *Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

### 4.6.1 EXISTING CONDITIONS

#### A. Introduction to Global Climate Change (GCC)

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth’s atmosphere, including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years. (UC, 2024d, p. 8)

An individual project like the proposed Project cannot generate enough GHG emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC. (UC, 2024d, p. 8)

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth’s atmosphere, but prevent radioactive heat from escaping, thus warming the earth’s atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. (UC, 2024d, p. 8)

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth’s average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation



of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature. (UC, 2024d, p. 8)

## **B. Greenhouse Gases**

### **1. Greenhouse Gases and Health Effects**

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties and are discussed below. For the purposes of analysis, emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases. (UC, 2024d, pp. 8-9)

The potential health effects related directly to the emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas. Figure 4.6-1, *Summary of Projected Global Warming Impact – 2070-2099*, presents the potential impacts of global warming. (UC, 2024d, p. 14)

Provided below is a description of GHGs, their sources, and their health effects.

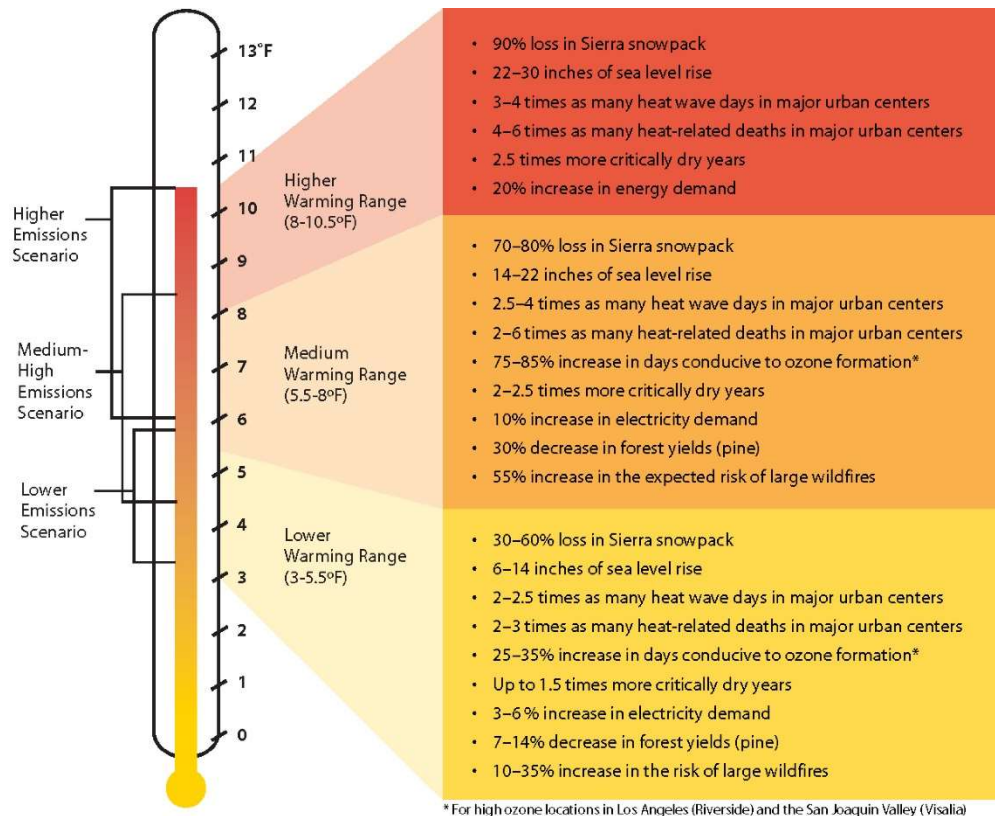
#### **□ Water**

Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. (UC, 2024d, Table 2-1)

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up). (UC, 2024d, Table 2-1)



Figure 4.6-1 Summary of Projected Global Warming Impact – 2070-2099



\* For high ozone locations in Los Angeles (Riverside) and the San Joaquin Valley (Visalia)

Source: (UC, 2024d, Exhibit 2-A)

The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves. (UC, 2024d, Table 2-1)

There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor. (UC, 2024d, Table 2-1)

#### ☐ **Carbon Dioxide (CO<sub>2</sub>)**

CO<sub>2</sub> is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO<sub>2</sub> concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO<sub>2</sub> in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. (UC, 2024d, Table 2-1)



CO<sub>2</sub> is emitted from natural and manmade sources. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood. CO<sub>2</sub> is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks. (UC, 2024d, Table 2-1)

Outdoor levels of CO<sub>2</sub> are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH), high concentrations of CO<sub>2</sub> can result in health effects such as headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO<sub>2</sub> in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour work week and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period. (UC, 2024d, Table 2-1)

#### ☐ **Methane (CH<sub>4</sub>)**

CH<sub>4</sub> is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO<sub>2</sub> and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs. (UC, 2024d, Table 2-1)

CH<sub>4</sub> has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH<sub>4</sub>. Other anthropogenic sources include fossil-fuel combustion and biomass burning. (UC, 2024d, Table 2-1)

CH<sub>4</sub> is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH<sub>4</sub> can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate. (UC, 2024d, Table 2-1)

#### ☐ **Nitrous Oxide (N<sub>2</sub>O)**

Nitrous oxide (N<sub>2</sub>O), also known as laughing gas, is a colorless GHG. Concentrations of N<sub>2</sub>O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). (UC, 2024d, Table 2-1)

N<sub>2</sub>O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N<sub>2</sub>O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction. (UC, 2024d, Table 2-1)



N<sub>2</sub>O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage). (UC, 2024d, Table 2-1)

#### ☐ **Chlorofluorocarbons (CFCs)**

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH<sub>4</sub> or ethane (C<sub>2</sub>H<sub>6</sub>) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface). (UC, 2024d, Table 2-1)

CFCs have no natural source. They are found in aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (UC, 2024d, Table 2-1)

In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation. (UC, 2024d, Table 2-1)

#### ☐ **Hydrofluorocarbons (HFCs)**

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC- 134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant. (UC, 2024d, Table 2-1)

HFCs are manmade for applications such as automobile air conditioners and refrigerants. No health effects are known to result from exposure to HFCs. (UC, 2024d, Table 2-1)

#### ☐ **Perfluorocarbons (PFCs)**

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF<sub>4</sub>) and hexafluoroethane (C<sub>2</sub>F<sub>6</sub>). The Environmental Protection Agency (EPA) estimates that concentrations of CF<sub>4</sub> in the atmosphere are over 70 parts per trillion (ppt). (UC, 2024d, Table 2-1)

The two main sources of PFCs are primary aluminum production and semiconductor manufacture. No health effects are known to result from exposure to PFCs. (UC, 2024d, Table 2-1)

#### ☐ **Sulfur Hexafluoride (SF<sub>6</sub>)**

Sulfur hexafluoride (SF<sub>6</sub>) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt. (UC, 2024d, Table 2-1)



SF<sub>6</sub> is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. (UC, 2024d, Table 2-1)

#### □ **Nitrogen Trifluoride (NF<sub>3</sub>)**

Nitrogen trifluoride (NF<sub>3</sub>) is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF<sub>3</sub> has a 100-year GWP of 17,200. (UC, 2024d, Table 2-1)

NF<sub>3</sub> is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers. Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis. (UC, 2024d, Table 2-1)

## **2. Global Warming Potential (GWP)**

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO<sub>2</sub> is utilized as the reference gas for GWP, and thus has a GWP of 1. CO<sub>2</sub> equivalent (CO<sub>2</sub>e) is a term used for describing the difference GHGs in a common unit. CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent GWP. (UC, 2024d, p. 15)

The atmospheric lifetime and GWP of selected GHGs are summarized in Table 4.6-1, *GWP and Atmospheric Lifetime of Select GHGs*. As shown in Table 4.6-1, GWP for the 6<sup>th</sup> Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO<sub>2</sub> to 25,200 for SF<sub>6</sub>. (UC, 2024d, p. 15)

**Table 4.6-1 GWP and Atmospheric Lifetime of Select GHGs**

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)
		6 <sup>th</sup> Assessment Report
CO <sub>2</sub>	Multiple	1
CH <sub>4</sub>	12 .4	28
N <sub>2</sub> O	121	273
HFC-23	222	14,600
HFC-134a	13.4	1,526
HFC-152a	1.5	164
SF <sub>6</sub>	3,200	25,200

(UC, 2024d, Table 2-2)

## **3. GHG Emissions Global Inventories**

Worldwide anthropogenic GHG emissions are tracked by the Intergovernmental Panel on Climate Change (IPCC) for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2020. Based on the latest available



data, the sum of these emissions totaled approximately 28,026,643 gigagram (Gg) CO<sub>2</sub>e<sup>1</sup> as summarized in Table 4.6-2, *Top GHG Producing Countries and the European Union*. (UC, 2024d, p. 15)

**Table 4.6-2 Top GHG Producing Countries and the European Union**

Emitting Countries	GHG Emissions (Gg CO <sub>2</sub> e)
China	12,300,200
United States	5,981,354
European Union (27-member countries)	3,706,110
India	2,839,420
Russian Federation	2,051,437
Japan	1,148,122
<b>Total</b>	<b>28,026,643</b>

(UC, 2024d, Table 2-3)

### ***United States***

As noted in Table 4.6-2, the United States, as a single country, was the number two producer of GHG emissions in 2020 (UC, 2024d, p. 16).

### ***State of California***

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a substantial contributor to the United States (U.S.) emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2022 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2020 GHG emissions period, California emitted an average 369.2 million metric tons of CO<sub>2</sub>e per year (MMTCO<sub>2</sub>e/yr) or 369,200 Gg CO<sub>2</sub>e (6.17% of the total United States GHG emissions). (UC, 2024d, p. 16)

## ***C. Effects of Climate Change in California***

### ***1. Public Health***

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report

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<sup>1</sup> The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2020 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.



indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced. (UC, 2024d, p. 16)

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat. (UC, 2024d, pp. 16-17)

## **2. *Water Resources***

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on the 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. (UC, 2024d, p. 17)

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. Winter tourism could be adversely affected, under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding. (UC, 2024d, p. 17)

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could 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 fresh water supply. (UC, 2024d, p. 17)

## **3. *Agriculture***

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth. (UC, 2024d, p. 17)



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 could 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. (UC, 2024d, p. 17)

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates. (UC, 2024d, p. 18)

#### **4. *Forests and Landscapes***

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation. (UC, 2024d, p. 18)

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the State. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC. (UC, 2024d, p. 18)

#### **5. *Rising Sea Levels***

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches. (UC, 2024d, p. 18)

#### **4.6.2 REGULATORY SETTING**

The following is a brief description of the federal, State, and local environmental laws and related regulations related to GHG emissions.



## **A. International Regulations**

### **1. Kyoto Protocol**

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities." (UNFCCC, n.d.)

The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. The detailed rules for the implementation of the Protocol were adopted at Conference of the parties (COP) 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012. (UNFCCC, n.d.)

On December 8, 2012, in Doha, Qatar, the "Doha Amendment to the Kyoto Protocol" was adopted. The amendment includes:

- New commitments for Annex I parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from January 1, 2013 to December 31, 2020;
- A revised list of greenhouse gases (GHG) to be reported on by parties in the second commitment period; and
- Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period. (UNFCCC, n.d.)

On December 21, 2012, the amendment was circulated by the Secretary-General of the United Nations, acting in his capacity as Depositary, to all parties to the Kyoto Protocol in accordance with Articles 20 and 21 of the Protocol. (UNFCCC, n.d.)

During the first commitment period, 37 industrialized countries and the European Community committed to reduce GHG emissions to an average of five percent against 1990 levels. During the second commitment period, parties committed to reduce GHG emissions by at least 18 percent below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of parties in the second commitment period is different from the first. (UNFCCC, n.d.)

### **2. The Paris Agreement**

The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. (UNFCCC, n.d.)

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to



pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. (UNFCCC, n.d.)

The Paris Agreement requires all parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all parties report regularly on their emissions and on their implementation efforts. (UNFCCC, n.d.)

In 2018, parties took stock of the collective efforts in relation to progress towards the goal set in the Paris Agreement and to inform the preparation of NDCs. There will be a global stock-taking every five years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by parties. (UNFCCC, n.d.)

The Paris Agreement entered into force on November 4, 2016, thirty days after the date on which at least 55 parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. (UNFCCC, n.d.)

On June 1, 2017, President Donald Trump announced he would begin the process of withdrawing the United States from the Paris Agreement. The United States withdrew from the Paris Agreement on November 4, 2020, which was the earliest effective date in accordance with articles within the Paris Agreement. On January 20, 2021, President Biden signed an instrument to bring the United States back into the Paris Agreement and the United States officially became a party to such agreement again on February 19, 2021 (US Department of State, 2021).

## **B. Federal Regulations**

### **1. Clean Air Act**

Coinciding with the 2009 meeting of international leaders in Copenhagen, on December 7, 2009, the EPA issued an Endangerment Finding under § 202(a) of the Clean Air Act (CAA), opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the CAA. To date, the EPA has not promulgated regulations on GHG emissions, but it has begun to develop them. (EPA, 2023a; DOJ, 2014)

Previously the EPA had not regulated GHGs under the CAA because it asserted that the CAA did not authorize it to issue mandatory regulations to address GCC and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In *Massachusetts v. Environmental Protection Agency et al.* (127 S. Ct. 1438 [2007]); however, the U.S. Supreme Court held that GHGs are pollutants under the CAA and directed the EPA to decide whether the gases endangered public health or welfare. The EPA had also not moved aggressively to regulate GHGs because it



expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before the U.S. Congress adopts major climate change legislation. The EPA's endangerment finding paves the way for federal regulation of GHGs with or without Congress. (EPA, 2023a; DOJ, 2014)

### **C. State Regulations**

#### **1. Title 24 Building Energy Standards**

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023 (CEC, 2023).

Part 11 of Title 24 is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.” The CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

As previously stated, the Title 24 Energy Efficiency Standards and CALGreen Code are updated on a regular basis, with the most recent approved updates consisting of the 2022 Energy Efficiency Standards and 2022 CALGreen Code, which became effective on January 1, 2023. Non-residential mandatory measures included in the 2022 CALGreen Code include:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).



- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
  - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
  - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
  - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).



- Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is projected to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).

Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

## **2. 2002 California Assembly Bill No. 1493 (AB 1493)**

AB 1493 required CARB to adopt the nation's first GHG emission standards for automobiles. On September 24, 2009, CARB adopted amendments to the "Pavley" regulations that reduce GHG emissions in new passenger vehicles from model year 2009 through 2016. These amendments were part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments cement California's enforcement of the Pavley regulations starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, n.d.)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles On June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the CAA requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions." (CARB, n.d.)



CARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by AB 1493 (Pavley). (CARB, n.d.)

The regulations had been threatened by automaker lawsuits and were stalled by the EPA's delay in reviewing and then initially denying California's waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations reduced GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, n.d.)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, n.d.)

### **3. *Executive Order S-3-05***

Executive Order (EO) S-3-05 documents GHG emission reduction goals, creates the Climate Action Team and directs the Secretary of the California EPA to coordinate efforts to meet the GHG reduction targets with the heads of other state agencies. The EO requires the Secretary to report back to the Governor and Legislature biannually on: progress toward meeting the GHG goals; GHG impacts to California; and applicable Mitigation and Adaptation Plans. EO S-3-05 goals for GHG emissions reductions include: reducing GHG emissions to 2000 levels by the year 2010; reducing GHG emissions to 1990 levels by the year 2020; and reducing GHG emissions to 80 percent below 1990 levels by 2050.

### **4. *California Assembly Bill 32 – Global Warming Solutions Act of 2006***

In September 2006, Governor Schwarzenegger signed Assembly Bill 32 (AB 32), the California Climate Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020, which represents a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. Pursuant to AB 32, the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The full implementation of AB 32 will help mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, and reducing waste. (CARB, 2018)

AB 32 specifically required that CARB do the following: (CARB, 2018)

- Prepare and approve a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020, and update the Scoping Plan every five years.
- Maintain and continue reductions in emissions of GHG beyond 2020.
- Identify the statewide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020.
- Identify and adopt regulations for discrete early actions that could be enforceable on or before January 1, 2010.



- Adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit GHG emissions.
- Convene an Environmental Justice Advisory Committee to advise CARB in developing and updating the Scoping Plan and any other pertinent matter in implementing AB 32.
- Appoint an Economic and Technology Advancement Advisory Committee to provide recommendations for technologies, research, and GHG emission reduction measures.

In November 2007, CARB completed its estimated calculations of Statewide 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons (MMTs) (emission sources by sector were: transportation – 35 percent; electricity generation – 26 percent; industrial – 24 percent; residential – 7 percent; agriculture – 5 percent; and commercial – 3 percent). Accordingly, 427 million metric tons of carbon dioxide equivalent (MMTCO<sub>2e</sub>) equivalent was established as the emissions limit for 2020. For comparison, CARB’s estimate for baseline GHG emissions was 473 MMTCO<sub>2e</sub> for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 MMTCO<sub>2e</sub>. “Business as usual” conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 MMTCO<sub>2e</sub>. (CARB, 2007)

AB 32 required CARB to develop a Scoping Plan which identified California’s strategy for meeting the AB 32 reduction goals for 2020. The Scoping Plan must be updated every five years. In December 2008, CARB approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions to achieve the AB 32 GHG reduction target. (CARB, 2018)

In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (Update), which builds upon the initial Scoping Plan with new strategies and recommendations. The Update highlights California’s progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to achieve long-term emission reduction goal described in Executive Order S-3-05. The Update recalculates 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 MTCO<sub>2e</sub> 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 MTCO<sub>2e</sub>. Based on the revised 2020 emissions level projection identified in the 2011 Final Supplement and the updated 1990 emissions levels identified in the discussion draft of the First Update, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO<sub>2e</sub> (down from 509 MTCO<sub>2e</sub>), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (CARB, 2017; CARB, 2018)

In November 2017, CARB released the Final 2017 Scoping Plan Update, which identifies the State’s post-2020 reduction strategy. The Final 2022 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill (SB) 32. Key GHG emissions reductions programs that the Second Update proposes to build upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard (LCFS), and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes. The Final 2017 Scoping Plan Update establishes a new emissions limit of 260 MMTCO<sub>2e</sub> for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030. (CARB, 2017) The state achieved its 2020 GHG emissions reductions target of returning to 1990 levels 4 years earlier than mandated by AB 32 (CARB, n.d.).



**5. California Senate Bill No. 1368 (SB 1368)**

In 2006, the State Legislature adopted Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006), which directs the California Public Utilities Commission (CPUC) to adopt a GHG emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed specified emissions criteria. Accordingly, SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. SB 1368 will lead to dramatically lower GHG emissions associated with California energy demand. (CEC, n.d.)

**6. Executive Order S-01-07**

Executive Order S-01-07 is effectively known as the Low Carbon Fuel Standard (LCFS). The Executive Order seeks to reduce the carbon intensity of California's passenger vehicle fuels by at least 10 percent by 2020. The LCFS requires fuel providers in California to ensure that the mix of fuel they sell into the California market meet, on average, a declining standard for GHG emissions measured in CO<sub>2</sub>e grams per unit of fuel energy sold.

**7. Senate Bill 1078 (SB 1078)**

SB 1078 establishes the California Renewables Portfolio Standard Program, which requires electric utilities and other entities under the jurisdiction of the California Public Utilities Commission to meet 20% of their renewable power by December 31, 2017 for the purposes of increasing the diversity, reliability, public health, and environmental benefits of the energy mix. According to the California Public Utilities Commission, "retail sellers either met or exceeded the interim 27% target and are on track to achieve their compliance requirements" (CPUC, n.d.).

**8. Senate Bill 107 (SB 107)**

SB 107 directed California Public Utilities Commission's Renewable Energy Resources Program to increase the amount of renewable electricity (Renewable Portfolio Standard) generated per year, from 17% to an amount that equals at least 20% of the total electricity sold to retail customers in California per year by December 31, 2010.

**9. Executive Order S-14-08**

On November 17, 2008, Governor Schwarzenegger signed Executive Order S-14-08, revising California's existing Renewable Portfolio Standard (RPS) upward to require all retail sellers of electricity to serve 33% of their load from renewable energy sources by 2020. In order to meet this new goal, a substantial increase in the development of wind, solar, geothermal, and other "RPS eligible" energy projects will be needed. Executive Order S-14-08 seeks to accelerate such development by streamlining the siting, permitting, and procurement processes for renewable energy generation facilities. To this end, Executive Order S-14-08 issues two directives: (1) the existing Renewable Energy Transmission Initiative will identify renewable energy zones that can be developed as such with little environmental impact, and (2) the California Energy Commission



(CEC) and the California Department of Fish and Wildlife (CDFW) will collaborate to expedite the review, permitting, and licensing process for proposed RPS-eligible renewable energy projects. (CA State Library, 2008)

#### **10. Senate Bill 97 (SB 97)**

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHGs as a part of the CEQA process. SB 97 required the Governor's Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of greenhouse gas emissions. Those CEQA Guidelines amendments clarified several points, including the following: (CA Legislative Info, 2007)

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions. (See CEQA Guidelines § 15064.4.)
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions. (See CEQA Guidelines § 15126.4(c).)
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (See CEQA Guidelines § 15126.2(a).)
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria. (See CEQA Guidelines § 15183.5(b).)
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (See CEQA Guidelines, Appendix F.)

As part of the administrative rulemaking process, the Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. (CA Legislative Info, 2007)

Of note, the current guidelines state that a lead agency shall have discretion to determine whether to use a quantitative model or methodology, or in the alternative, rely on a qualitative analysis or performance-based standards. Pursuant to CEQA Guidelines § 15064.4(a), "A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project; or (2) Rely on a qualitative analysis or performance-based standards." (CA Legislative Info, 2007)

CEQA Guidelines provide that an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in § 15065(a)(3) (See CEQA Guidelines § 15130(a)).

Section 15064.4(b) of the guidelines provides direction for lead agencies for assessing the significance of impacts of greenhouse gas emissions:



1. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; or
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable.

The CEQA Guideline amendments do not identify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, they call for a “good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.” The amendments encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies’ discretion to make their own determinations based upon substantial evidence. The amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. Specific GHG language incorporated in the Guidelines’ suggested Environmental Checklist (Guidelines Appendix G) is as follows:

#### *VIII. GREENHOUSE GAS EMISSIONS*

*Would the project:*

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

#### **11. 2018 State CEQA Guidelines Update**

In January 2018, OPR transmitted its proposal for comprehensive updates to the State CEQA Guidelines to the California Natural Resources Agency. The updated Guidelines became effective on December 28, 2018, and include changes to State CEQA Guidelines § 15064.4 related to determining the significance of impacts from GHG emissions. The changes to § 15064.4 include clarification in how to determine the significance of



a project's GHG emissions, indicate that the lead agency has discretion to use a model or methodology to estimate GHG emissions resulting from a project, and allow for the use of environmental standards as thresholds of significance in order to promote consistency in significance determinations.

## **12. California Senate Bill 375**

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. (CARB, n.d.)

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). CARB will periodically review and update the targets, as needed. (CARB, n.d.)

Each of California's MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate "alternative planning strategy" (APS) to meet the targets. The APS is not a part of the RTP. (CARB, n.d.)

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the APS. Developers can get relief from certain environmental review requirements under CEQA if their new residential and mixed-use projects are consistent with a region's SCS (or APS) that meets the targets (see Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28.). (CARB, n.d.)

## **13. Executive Order B-30-15**

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which sets a goal to reduce GHG emissions in California to 40 percent below 1990 levels by 2030. The 2030 target serves as a benchmark goal on the way to achieving the GHG reductions goal set by former Governor Schwarzenegger via Executive Order S-3-05 (i.e., 80 percent below 1990 greenhouse gas emissions levels by 2050).

## **14. California Senate Bill 32**

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide greenhouse gas reduction target of 80% below 1990 levels by 2050. (CA Legislative Info, 2016a)



**15. California Climate Crisis Act (AB 1279)**

AB 1279, also known as the California Climate Crisis Act, was signed by Governor Newsom on September 16, 2022. AB 1279 declares that it is the policy of the State to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045; to 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% below the 1990 levels. The bill requires the California Air Resources Board (CARB) to work with relevant State agencies to ensure that updates to the CARB Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California. AB 1279 also requires CARB to submit an annual report evaluating progress towards these policies. (CA Legislative Info, 2022c)

**16. Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020)**

SB 1020, also known as the Clean Energy, Jobs, and Affordability Act of 2022, revised State policy to include interim targets requiring 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. SB 1020 also requires each State agency to ensure that zero-carbon resources and eligible renewable energy resources supply 100 percent of electricity procured to serve their agency by December 31, 2035. In addition, SB 1020 requires the State Water Project (SWP) to procure eligible renewable energy and zero-carbon resources as necessary to meet the clean energy requirements specified for all State agencies. Finally, SB 1020 requires the California Public Utilities Commission (CPUC) to develop utility affordability metrics for both electricity and gas service. (CA Legislative Info, 2022d)

**17. Carbon sequestration: Carbon Capture, Removal, Utilization, and Storage Program (Senate Bill 905)**

SB 905 requires CARB to establish a Carbon Capture, Removal, Utilization, and Storage (CCRUS) Program and adopt regulations for a model unified permit program for the construction and operation of CCRUS projects. SB 905 is intended to accelerate the deployment of carbon management technologies and ensuring they are deployed in a safe and equitable way. SB 905 requires the CCRUS Program to ensure that carbon dioxide capture, removal, and sequestration projects include specified components including, among others, certain monitoring activities. In addition, SB 905 requires that by January 1, 2025, CARB shall adopt regulations for a unified permit application for the construction and operation of carbon dioxide capture, removal, or sequestration projects to expedite the issuance of permits or other authorizations for the construction and operation of those projects. SB 905 also requires the establishment of a centralized public database to track the deployment of carbon capture, utilization, or storage (CCUS) technologies and carbon dioxide removal (CDR) technologies. (CA Legislative Info, 2022e)



## **18. Assembly Bill 1757**

AB 1757 directs the California Natural Resources Agency (CNRA) to determine an ambitious range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions for 2030, 2038, and 2045 to support State goals to achieve carbon neutrality and foster climate adaptation and resilience. Additionally, AB 1757 requires these targets to be integrated into the CARB Scoping Plan and other State policies. It also includes provisions to avoid double counting emission reductions, updates the Natural and Working Lands Climate Smart Strategy, develops GHG tracking protocols, and biennially post progress made in achieving the targets on CNRA's internet website. In addition, AB 1757 requires CARB to develop standard methods for State agencies to consistently track greenhouse gas emissions and reductions, carbon sequestration, and, where feasible, additional benefits from natural and working lands over time. (CA Legislative Info, 2022b)

### **D. Local and Regional Regulations**

#### **1. South Coast Air Quality Management District (SCAQMD)**

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions. (UC, 2024d, p. 47)

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach (UC, 2024d, pp. 47-48):

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:



- Residential and commercial land use: 3,000 MTCO<sub>2</sub>e/yr
- Industrial land use: 10,000 MTCO<sub>2</sub>e/yr
- Based on land use type: residential: 3,500 MTCO<sub>2</sub>e/yr; commercial: 1,400 MTCO<sub>2</sub>e/yr; or mixed use: 3,000 MTCO<sub>2</sub>e/yr
- Tier 4 has the following options:
  - Option 1: Reduce Business-as-Usual (BAU) emissions by a certain percentage (this percentage is currently undefined)
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO<sub>2</sub>e per SP per year for projects and 6.6 MTCO<sub>2</sub>e per SP per year for plans;
  - Option 3: 2035 target of 3.0 MTCO<sub>2</sub>e per SP per year for projects and 4.1 MTCO<sub>2</sub>e per SP per year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO<sub>2</sub> concentrations at 450 ppm, thus stabilizing global climate. (UC, 2024d, p. 48)

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the Project evaluated herein would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations. (UC, 2024d, p. 48)

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules (UC, 2024d, p. 48):

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

## **2. *Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)***

The Southern California Association of Governments (SCAG) is a Joint Powers Authority (JPA) under California State law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning



Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles.

SCAG's 2024-2050 *Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS)*, also referred to as *Connect SoCal*, develops long-range regional transportation plans including a sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. The RTP/SCS provides objectives for meeting air pollution emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The Subregional Sustainable Communities Strategies identifies the Project Site as being located in an area with a "Standard Suburban" land use pattern, which is defined as auto-oriented development with a minimal mix of land uses.

The *Goods Movement Technical Report* of *Connect SoCal* recognizes that the SCAG region is the premier trade gateway for the United States. *Connect SoCal* acknowledges that the SCAG region has witnessed continued growth for warehousing, distribution, cold storage and truck terminal facilities, with a majority of the growth for national and regional distribution facilities occurring in the Inland Empire. Through *Connect SoCal*, SCAG is working on various regional strategies to maintain the SCAG region as an important trade gateway while addressing regional transportation efficiency and environmental sustainability.

#### 4.6.3 BASIS FOR DETERMINING SIGNIFICANCE

While estimated Project-related GHG emissions can be quantified, the direct impacts of such emissions on GCC and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly or indirectly affect the global climate.

AB 32 states, in part, that "[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California." Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would have no potential to result in a direct impact to global warming; rather, Project-related contributions to GCC, if any, only have potential significance on a cumulative basis. Therefore, the analysis below focuses on the Project's potential to contribute to GCC in a cumulatively-considerable way.

Based on the results of the Initial Study (EIR *Technical Appendix A*), it was determined that the Project has the potential to result in a significant impact due to greenhouse gas emissions if the Project or any Project-related component would:

- a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*



- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The above-listed thresholds are derived directly from Section VIII. (Greenhouse Gas Emissions) of Appendix H to the CEQA Guidelines and address the typical, adverse effects related to greenhouse gas emissions that could result from development projects.

The above-listed thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, State CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The State CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the State CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The State CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis.

The City of San Bernardino has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions and has not adopted a plan or mitigation program addressing GHG emissions, such as a Climate Action Plan (CAP). The SCAQMD's adopted numerical threshold is 10,000 MTCO<sub>2</sub>e per year for industrial stationary source emissions. However, 3,000 MTCO<sub>2</sub>e is typically selected as the significance criterion for land use development projects and is based upon the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for nonindustrial projects, as described in the



SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. (UC, 2024d, pp. 40-41)

The 3,000 MTCO<sub>2</sub>e threshold is the most stringent and applicable threshold for industrial and non-industrial projects. In setting the threshold at 3,000 MTCO<sub>2</sub>e per year, SCAQMD researched a database of projects kept by the Governor's Office of Planning and Research (OPR). That database contained 798 projects, 87 of which were removed because they were very large projects and/or outliers that would skew emissions values too high, leaving 711 as the sample population to use in determining the 90<sup>th</sup> percentile capture rate. The SCAQMD analysis of the 711 projects within the sample population combined commercial, residential, and mixed-use projects. It should be noted that the sample of projects included warehouses and other light industrial land uses but did not include industrial processes (i.e., oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). For these stationary sources and industrial processes, the 10,000 MTCO<sub>2</sub>e threshold would apply instead of the 3,000 MTCO<sub>2</sub>e threshold that is used herein and applied to the Project.

Use of this threshold also is consistent with guidance provided in the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change handbook, as such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90% of emissions from future development. (UC, 2024d, p. 41)

A GHG significance threshold based on a 90% emission capture rate is appropriate to address the long-term adverse potential impacts associated with GHG emissions. Further, a 90% emission capture rate sets the emission threshold low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that SCAQMD estimates that these GHG emissions would account for <1% of future 2050 statewide GHG emissions target (85 MMTCO<sub>2</sub>e/yr). In addition, these small projects would be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. (UC, 2024d, p. 41)

#### 4.6.4 IMPACT ANALYSIS

##### A. Methodology

In May 2023 the CAPCOA in conjunction with other California air districts, including SCAQMD, released the latest version of CalEEMod Version 2022.1.1.12. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity are provided in Appendices 3.1 through 3.2 of the Project's GHGA (*Technical Appendix H*). CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, and on-site equipment. (UC, 2024d, p. 43)



A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life-cycle analysis (i.e., assessing economy-wide GHG emissions from the processes in manufacturing and transporting all raw materials used in the Project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes.

Additionally, the SCAQMD recommends analyzing direct and indirect project GHG emissions generated within California and not life-cycle emissions because the life-cycle effects from a project could occur outside of California, might not be very well understood, or documented, and would be challenging to mitigate. Additionally, the science to calculate life cycle emissions is not yet established or well defined; therefore, SCAQMD has not recommended, and is not requiring, life-cycle emissions analysis. (UC, 2024d, pp. 43-44)

***B. Analysis of Project Impacts due to GHGs***

***Threshold a.: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Provided below is an assessment of the Project's GHG emissions during construction and long-term operation.

**☐ Construction Emissions**

Project construction activities would generate CO<sub>2</sub> and CH<sub>4</sub> emissions. The Project's Air Quality Impact Analysis ("AQIA"; EIR *Technical Appendix CI*) contains detailed information regarding Project construction activities. As discussed in the AQIA, construction-related emissions are expected from the following construction activities: site preparation, grading, building construction, paving, and architectural coating. (UC, 2024d, p. 44)

For the purposes of analysis, construction of Project is expected to commence in July 2024 and would last through June 2026. The construction schedule utilized in the analysis previously was presented in Table 3-1 in EIR Section 3.0, *Project Description*, and represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines*. (UC, 2024d, p. 44)

A detailed summary of construction equipment assumptions by phase previously was provided in EIR Table 3-2 in EIR Section 3.0, *Project Description*. Detailed modeling inputs/outputs for the Project's construction-related emissions are included in Appendix 4.1 of the Project's GHGA (*Technical Appendix H*).

For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life, then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year



period and added to the annual operational phase GHG emissions. The amortized construction emissions are presented in Table 4.6-3, *Amortized Annual Construction Emissions*. (UC, 2024d, p. 45)

**Table 4.6-3 Amortized Annual Construction Emissions**

Year	Emissions (MT/yr)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	Total CO <sub>2</sub> e
2024	541.73	0.03	0.02	0.29	548.25
2025	961.79	0.05	0.06	0.98	981.92
2026	445.24	0.02	0.03	0.40	453.92
Total GHG Emissions	1948.76	0.09	0.11	1.66	1984.09
<b>Amortized Construction Emissions</b>	<b>64.96</b>	<b>0.00</b>	<b>0.00</b>	<b>0.06</b>	<b>66.14</b>

CalEEMod annual construction-source emissions are presented in Appendix 4.1 of the Project's GHGA (*Technical Appendix H*).

<sup>A</sup> CalEEMod reports the most common GHGs emitted which include CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. These GHGs are then converted into the CO<sub>2</sub>e by multiplying the individual GHG by the GWP. (UC, 2024d, Table 3-3)

#### ☐ **Operational Emissions**

Operational activities associated with the Project would result in emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the following primary sources: area source emissions; energy source emissions; mobile source emissions; stationary source emissions; on-site cargo handling equipment emissions; water supply, treatment, and distribution; and solid waste. Each is discussed below. (UC, 2024d, p. 46)

#### **Area Source Emissions**

##### **Landscape Maintenance Equipment**

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. (UC, 2024d, p. 46)

#### **Energy Source Emissions**

##### **Combustion Emissions Associated with Natural Gas and Electricity**

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO<sub>2</sub> and other GHGs directly into the atmosphere. These emissions are considered direct emissions associated with a building; the building energy use emissions do not include street lighting. Based on information provided by the Project Applicant, no natural gas would be used as a result of the Project, and as such use of natural gas is not considered in the analysis. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to



be indirect emissions. Electricity usage associated with the Project was calculated by CalEEMod using default parameters. Additionally, the Project would include the installation of solar, which is expected to generate approximately 365,000 kWh per year. (UC, 2024d, pp. 46-47)

### **Mobile Source Emissions**

The Project-related GHG emissions derive primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics available from the Project's Traffic Analysis ("TA"; EIR *Technical Appendix L1*) were utilized in the analysis. Per the Project's TA, the Project is expected to generate a total of approximately 782 two-way vehicular trips (actual vehicles) per day (45 AM peak hour and 57 PM peak hour) (Urban Crossroads, 2023f, Table 4-2). The passenger car and truck fleet for the proposed industrial uses are broken down by passenger car and truck type (or axle type).

In order to determine emissions from passenger car vehicles, CalEEMod defaults for trip length and trip purpose were utilized. Default vehicle trip lengths for primary trips were populated using data from the local Metropolitan Planning Organization/Regional Transportation Planning Agencies (MPO/RTPA). Trip type percentages and trip lengths provided by MPO/RTPAs truncate data at their demonstrative borders. This analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1<sup>2</sup> & LDT2<sup>3</sup>), Medium-Duty-Vehicles (MDV), and Motorcycles (MCY) vehicle types. In order to account for emissions generated by passenger cars, the fleet mix in Table 3-4 of the Project's GHGA (*Technical Appendix H*) was utilized. (UC, 2024d, p. 47)

To determine emissions from trucks for the proposed industrial uses, the analysis incorporated the SCAQMD recommended truck trip length of 15.3 miles for 2-axle (LHDT1<sup>4</sup>, LHDT2<sup>5</sup>), 14.2 miles for 3-axle (MHDT) trucks, and 39.9 miles for 4+-axle (HHDT) trucks and weighting the average trip lengths using traffic trip percentages. The trip length function for the high-cube transload warehouse use has been conservatively calculated to 30.54 miles, respectively, with an assumption of 100% primary trips for the proposed industrial land uses. This trip length assumption is higher than the CalEEMod defaults for trucks. The truck fleet mix is estimated by rationing the trip rates for each truck type based on information provided by the SCAQMD recommended truck mix, by axle type. Heavy trucks are broken down by truck type (or axle type) and are categorized as either Light-Heavy-Duty Trucks (LHDT1 & LHDT2)/2-axle, Medium-Heavy-Duty Trucks (MHDT)/3-axle, and Heavy-Heavy-Duty Trucks (HHDT)/4+-axle. To account for emissions generated by trucks, the fleet mix in Table 3-5 of the Project's GHGA (*Technical Appendix H*) was utilized. (UC, 2024d, p. 48)

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<sup>2</sup> Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

<sup>3</sup> Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

<sup>4</sup> Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.

<sup>5</sup> Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.



### ***Stationary Sources***

The proposed Project was conservatively assumed to include installation of one (1), 300-horsepower diesel-powered fire pump operating for up to 1 hour per day, 1 day per week for up to 50 hours per year for maintenance and testing purposes. Emissions associated with the stationary diesel-powered emergency fire pumps were calculated using CalEEMod. (UC, 2024d, p. 48)

### ***On-Site Cargo Handling Equipment Emissions***

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For the proposed Project, on-site modeled operational equipment includes up to three (3) 175 horsepower (hp), diesel gas-powered cargo handling equipment – port tractor operating at 4 hours a day<sup>6</sup> for 365 days of the year. (UC, 2024d, p. 48)

### ***Water Supply, Treatment, and Distribution***

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used. (UC, 2024d, pp. 48-49)

### ***Solid Waste***

Industrial land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the proposed Project were calculated by CalEEMod using default parameters. (UC, 2024d, p. 49)

## **□ Project Emissions Summary and Impact Analysis**

The estimated Project-related GHG emissions are summarized on Table 4.6-4, *Project GHG Emissions (Without Mitigation)*. Detailed operation model outputs for the Project are presented in Appendix 3.1 of the Project's GHGA (*Technical Appendix H*). As shown in Table 4.6-4, construction and operation of the Project would generate 3,300.76 MTCO<sub>2</sub>e/yr, which slightly would exceed the identified significance threshold of 3,000 MTCO<sub>2</sub>e/yr; therefore, Project-related GHG emissions are considered potentially significant. Thus, prior to mitigation the Project would result in a significant cumulatively-considerable impact with respect to GHG emissions.

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<sup>6</sup> Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.



Table 4.6-4 Project GHG Emissions (Without Mitigation)

Emission Source	Emissions (MT/yr)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	Total CO <sub>2</sub> e
Annual construction-related emissions amortized over 30 years	65.11	3.17E-03	3.50E-03	5.55E-02	66.29
Mobile Source	2,148.92	0.15	0.26	2.73	2,232.03
Area Source	11.30	0.00	0.00	0.00	11.34
Energy Source	156.27	0.01	0.00	0.00	157.18
Water Usage	180.59	4.20	0.10	0.00	315.82
Waste	46.72	4.67	0.00	0.00	163.45
Cargo Handling Equipment Source	342.00	0.01	0.00	0.00	343.18
Stationary Source	11.42	0.00	0.00	0.00	11.46
<b>Total CO<sub>2</sub>e (All Sources)</b>	<b>3,300.76</b>				

(UC, 2024d, Table 3-6)

***Threshold b.: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with the CARB 2022 Scoping Plan is discussed below. It should be noted that the Project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 and SB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary, since both of these plans have been superseded by the 2022 Scoping Plan. (UC, 2024d, p. 51)

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would not conflict with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies that would be applicable to the vehicles servicing the Project (through vehicle manufacturer compliance) include:

- Advanced Clean Cars II: This regulation combines several regulations into one package including the Low-Emission Vehicle (LEV) criteria and greenhouse gas regulations and the zero-emission vehicle (ZEV) regulation. These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks and SUVs and require an increased number of zero-emission vehicles to meet air quality and climate change emissions goals.
- Advanced Clean Trucks: This regulation is a manufacturers ZEV sales requirement and a one-time reporting requirement for large entities and fleets. Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, Senate Bill (SB) 350, and Assembly Bill (AB) 32.



- Advanced Clean Fleets: This regulation requires fleets that are well suited for electrification to reduce emissions through requirements to both phase-in the use of ZEVs for targeted fleets and requirements that manufacturers only manufacture ZEV trucks starting in the 2036 model year.
- Zero Emission Forklifts: CARB staff is currently developing a measure that would drive greater deployment of zero-emission forklifts within fleets throughout the state. This measure, which has been identified in CARB's Mobile Source Strategy, State Implementation Plan, and Sustainable Freight Action Plan, is one of several near-term actions intended to facilitate further zero-emission equipment penetration in the off-road sector.
- The Off-Road Zero-Emission Targeted Manufacturer rule: CARB staff plans to develop a regulation for Board consideration in 2027 that would require manufacturers of off-road equipment and/or engines to produce for sale ZE equipment and/or powertrains as a percentage of their annual statewide sales volume. This measure is expected to increase the availability of ZE options in the off-road sector and support other potential measures that promote and/or require the purchase and use of such options.
- Clean Off-Road Fleet Recognition Program: This voluntary program applies to entities that own or operate off-road vehicles and provides monetary and non-monetary incentives for zero-emissions equipment by 2035.
- In-use Off-Road Diesel-Fueled Fleets Regulation: The In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers). This includes vehicles that are rented or leased (rental or leased fleets).
- Off-Road Zero-Emission Targeted Manufacturer rule: This measure would require manufacturers to produce zero-emission equipment and/or powertrains as a percentage of their annual statewide sales volume.
- Carbon pricing through the Cap-and-Trade Program: The Cap-and-Trade Program is a key element of California's strategy to reduce greenhouse gas emissions. It complements other measures to ensure that California cost-effectively meets its goals for greenhouse gas emissions reductions.
- Low Carbon Fuel Standard: The Low Carbon Fuel Standard is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

Through implementation of Mitigation Measures MM 4.6-1 and MM 4.6-2, and Project Design Feature PDF 4.6-1, the Project would comply with the 2022 Scoping Plan measures by reducing the Project's GHG emissions by utilizing all electric on-site equipment, utilizing low-flow and high efficiency fixtures, and providing a 250-kw solar system. Implementation of these measures would reduce the Project's operational emissions to below the SCAQMD's recommended numeric threshold of 3.000 MTCO<sub>2</sub>e per year, and therefore reduce the Project impacts to less-than-significant levels. As such, the Project would be consistent with the 2022 Scoping Plan. (UC, 2024d, p. 52) Therefore, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less than significant.



The 2024-2050 RTP/SCS was prepared to ensure that the SCAG region attains the per capita vehicle miles targets for passenger vehicles identified by CARB (and, thus, meeting associated GHG emissions targets), as required by Senate Bill 375. As explained in EIR Section 4.8, *Transportation*, the Project would not conflict with applicable measures of the 2024-2050 RTP/SCS and, therefore, would not interfere with the region's ability to minimize GHG emissions from transportation sources.

#### 4.6.5 CUMULATIVE IMPACTS

As discussed in subsection 4.6.3, there is no evidence at this time that would indicate that the emissions from a project the size of the Project would directly or indirectly affect the global climate. As such, Project impacts due to GHG emissions are inherently cumulative in nature.

As discussed under the analysis of Threshold a., the Project would result in the emissions of 3,300.76 MTCO<sub>2</sub>e/year; thus, the proposed Project would exceed the City's screening threshold of 3,000 MTCO<sub>2</sub>e/yr. Accordingly, the Project would have the potential to result in a cumulatively-considerable impact on the environment with respect to GHG emissions.

As discussed under the analysis of Threshold b., the Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan. As such, the Project would result in less-than-cumulatively considerable impacts due to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

#### 4.6.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Cumulatively-Considerable Impact. The Project would result in approximately 3,300.76 MTCO<sub>2</sub>e per year; thus, the proposed Project slightly would exceed the City's screening threshold of 3,000 MTCO<sub>2</sub>e per year. Thus, prior to mitigation the Project would result in a significant cumulatively-considerable impact due to emissions of GHGs that may have a significant impact on the environment.

Threshold b: Less-than-Significant Impact. The Project would be consistent with or otherwise would not conflict with the CARB 2022 Scoping Plan, which is the applicable plan adopted for the purpose of reducing the emissions of GHGs. As such, Project impacts due to a conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant.

#### 4.6.7 MITIGATION

##### ***Applicable City Regulations and Design Requirements***

The following are City Regulations and Design Requirements (CRDRs) that are applicable to the proposed Project. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations and design requirements. The Project would be required to comply with the measures set forth in CRDR 4.6-1, and with incorporation of project design features, GHG emissions would be reduced and would not exceed the applicable numeric threshold applied to the Project.



### Applicable Regulations

- CRDR 4.6-1 The Project shall comply with all mandates imposed by the State of California and SCAQMD aimed at the reduction of GHG emissions. Those that are applicable to the Project and vehicles that would access the Project Site, and that would assist in the reduction of greenhouse gas emissions are listed below:
- Global Warming Solutions Act of 2006 (AB32). Requires California to reduce its GHG emissions to 1990 levels by 2020, which represents a reduction of approximately 15 percent below emissions expected under a “business as usual” scenario. Pursuant to AB 32, the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions.
  - Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375). Supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use.
  - Pavley Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
  - Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements.
  - Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
  - Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
  - Renewable Portfolio Standards (SB 100). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to achieve a target of 50% renewable resources by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.
  - Senate Bill 32 (SB 32). Requires the state to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.



- SCAQMD Rule 2305. The SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule, on May 7, 2021. Owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NOX) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities.

### Applicable Design Requirements

- PDF 4.6-1 The Project design includes a proposed 250-kw solar system on the building, which is anticipated to generate up to 365,000 kWh/annually. The proposed solar system would reduce GHG emissions associated with the Project's anticipated energy demands. Accordingly, prior to or shortly after tenant occupancy, the 250-kw solar system shall be installed and operational.

### Mitigation

- MM 4.6-1 Prior to tenant occupancy, the City shall condition the Project to require that all on-site equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) be powered by electricity, and a minimum of one (1) charging station for the on-site equipment shall be accommodated on site.
- MM 4.6-2 In order to reduce the Project's demand for water resources and associated GHG emissions, prior to issuance of building permits, the City of San Bernardino shall review the building plans to ensure that the plans require the provision of low-flow and high-efficiency fixtures including toilets, urinals, and faucets. Low-flow and high-efficiency fixtures shall have the CalEEMod assumed reduction in flow of 13% for toilets, 12% for urinals, and 30% for faucets, relative to Title 24 requirements, and shall perform better than the minimum efficiency standard established by ENERGY STAR.

### 4.6.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant Impact With Mitigation Incorporated. Implementation of Project Design Feature PDF 4.6-1 and Mitigation Measures MM 4.6-1 and MM 4.6-2 would reduce the Project's operational emissions of GHGs by utilizing electric on-site equipment, utilizing low-flow and high efficiency fixtures, and providing a 250-kw solar system on site. As shown in Table 4.6-5, *Project GHG Emissions Summary – With CRDR, PDFs, and Mitigation*, implementation of the required mitigation and CRDR would reduce the Project's annual emissions of GHGs to approximately 2,911.80 MTCO<sub>2</sub>e per year. As such, with implementation of the CRDR and mitigation measures, the Project's GHG emissions would be reduced to below the SCAQMD's recommended numeric threshold of 3,000 MTCO<sub>2</sub>e per year, and therefore Project impacts would be reduced to less-than-significant levels and impacts would be less-than-cumulatively considerable.



Table 4.6-5 Project GHG Emissions Summary – With CRDR, PDFs, and Mitigation

Emission Source	Emissions (MT/yr)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	Total CO <sub>2</sub> e
Annual construction-related emissions amortized over 30 years	65.11	3.17E-03	3.50E-03	5.55E-02	66.29
Mobile Source	2,148.92	0.15	0.26	2.73	2,232.03
Area Source	11.30	0.00	0.00	0.00	11.34
Energy Source	137.15	0.01	0.00	0.00	137.95
Water Usage	165.48	3.85	0.09	0.00	289.28
Waste	46.72	4.67	0.00	0.00	163.45
Stationary Source	11.42	0.00	0.00	0.00	11.46
<b>Total CO<sub>2</sub>e (All Sources)</b>	<b>2,911.80</b>				

(UC, 2024d, Table 3-7)



## 4.7 NOISE

This Subsection addresses the environmental issue of noise, including existing noise levels in the Project area and the Project's potential to introduce new or elevated sources of noise. The analysis contained herein incorporates information contained in a Noise Impact Analysis (herein, "NIA") entitled, "5<sup>th</sup> & Sterling Noise Impact Analysis," prepared by Urban Crossroads, Inc. (herein, "Urban Crossroads"), dated June 14, 2024, and included as *Technical Appendix K* to this EIR (UC, 2024e).

Based on analyses conducted as part of the Project's Initial Study, and the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), the City determined that the Project would result in a less-than-significant impact under one of the thresholds identified in Section XIII (Noise) of Appendix G to the CEQA Guidelines. Specifically, the Project's Initial Study concluded that the Project would result in a less-than-significant impact under the following threshold of significance:

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Accordingly, no additional analysis of the above-listed threshold is required. Refer to the Project's Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.11 for a discussion and analysis of the above-listed threshold not analyzed in this subsection.

This Subsection focuses on the Project's potential to adversely affect the remaining thresholds of significance under Section XIII (Noise) of Appendix G to the CEQA Guidelines:

- 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 ordinance, or applicable standards of other agencies?*
- b. Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?*

### 4.7.1 EXISTING CONDITIONS

#### A. Noise Fundamentals

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Table 4.7-1, *Typical Noise Levels*, presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below. (UC, 2024e, p. 7)



Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA at approximately 1,000 feet, which can cause serious discomfort. Another important aspect of noise is the duration of the sound and the way it is described and distributed in time. (UC, 2024e, pp. 7-8)

Table 4.7-1 Typical Noise Levels

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	SPEECH INTERFERENCE
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

(UC, 2024e, Exhibit 2-A)

## B. Noise Descriptors

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most used figure is the equivalent level (Leq). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the “average” noise levels within the environment. (UC, 2024e, p. 8)

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely



evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA Leq sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA Leq sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when noise can become more intrusive. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of San Bernardino relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources. (UC, 2024e, p. 8)

### **C. Sound Propagation**

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the factors discussed below. (UC, 2024e, p. 8)

#### **1. Geometric Spreading**

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (UC, 2024e, p. 8)

#### **2. Ground Absorption**

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (UC, 2024e, pp. 8-9)

#### **3. Atmospheric Effects**

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (UC, 2024e, p. 9)



#### 4. *Shielding*

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The Federal Highway Administration (FHWA) does not consider the planting of vegetation to be a noise abatement measure. (UC, 2024e, p. 9)

#### D. *Response to Noise*

Approximately 16 percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty to thirty percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels: a change of 3 dBA is considered “barely perceptible;” and a change of 5 dBA is considered “readily perceptible.” (UC, 2024e, p. 10)

#### E. *Vibration*

Vibration is the periodic oscillation of a medium or object. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and decibels (dB) and is denoted as VdB. (UC, 2024e, p. 11)

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. (UC, 2024e, p. 11)

### 4.7.2 EXISTING NOISE CONDITIONS

#### A. *Existing Study Area Ambient Noise Conditions*

To assess the existing noise level environment, Urban Crossroads recorded 24-hour noise level measurements at five locations in the vicinity of the Project Site. The noise measurement locations are identified on Figure



4.7-1, *Noise Measurement Locations*. The results of the existing noise level measurements are summarized below. Refer to Appendix 5.2 of *Technical Appendix K* for the noise measurement worksheets used by Urban Crossroads to calculate the noise levels, including a summary of the hourly noise levels and the minimum and maximum observed noise levels at each measurement location. (UC, 2024e, p. 25)

Table 4.7-2, *24-Hour Ambient Noise Level Measurements*, provides the average or equivalent noise levels used to describe the daytime and nighttime ambient conditions. The noise measurements presented in Table 4.7-2 focus on the average or equivalent sound levels (Leq). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The daytime and nighttime energy average noise levels presented in Table 4.7-2 represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 to the Project's NIA (*Technical Appendix K*) provides summary worksheets of the noise levels for each of the daytime and nighttime hours. (UC, 2024e, p. 26)

**Table 4.7-2 24-Hour Ambient Noise Level Measurements**

Location <sup>1</sup>	Description	Energy Average Noise Level (dBA Leq) <sup>2</sup>	
		Daytime	Nighttime
L1	Located west of the site near the residence at 7926 Sterling Avenue	66.8	64.3
L2	Located west of the site near the residence at 7890 Sterling Avenue	66.3	61.9
L3	Located northwest of the site near the residence at 7832 Sterling Avenue	66.1	59.0
L4	Located northeast of the site near the residence at 26044 6th St.	59.9	53.1
L5	Located east of the site near the residence at 7942 Lankershim Ave.	59.2	54.0

<sup>1</sup> See Figure 4.7-1 for the noise level measurement locations.

<sup>2</sup> Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2 of the Project's NIA (*Technical Appendix K*).

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.  
(UC, 2024e, Table 5-1)

## **B. Existing Groundborne Vibration**

There are no sources of perceptible groundborne vibration on the Project Site under existing conditions. Vibration sources in the surrounding area primarily are associated with traffic traveling on local roadways.

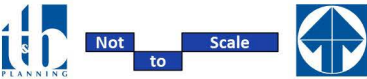
## **C. Existing Airport Noise**

The San Bernardino International Airport (SBIA) is located less than one-mile south of the Project Site. This places the Project Site within the SBIA Influence Area. As shown on Exhibit 3-C of the Project's NIA (*Technical Appendix K*), the Project Site is located outside of the 60 dBA CNEL noise level contours of the



Source(s): Urban Crossroads (10-26-2023)

Figure 4.7-1



Noise Measurement Locations



SBIA. The City of San Bernardino General Plan Noise Element, Figure N-1, *Land Use Compatibility for Community Noise Exposure* indicates that the *normally acceptable* exterior noise level for non-noise-sensitive land use is 70 dBA CNEL. Thus, because the Project Site is located outside of the 60 dBA CNEL contour for the SBIA, the Project Site is not subject to airport-related noise exceeding 70 dBA CNEL. (UC, 2024e, pp. 18, 22)

### 4.7.3 REGULATORY SETTING

The following is a brief description of the federal, state, and local environmental laws and related regulations related to noise.

#### A. Federal Regulations

##### 1. **Noise Control Act of 1972**

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. The Act also serves to (1) establish a means for effective coordination of federal research and activities in noise control; (2) authorize the establishment of federal noise emission standards for products distributed in commerce; and (3) provide information to the public respecting the noise emission and noise reduction characteristics of such products. (EPA, 2023g)

While primary responsibility for control of noise rests with state and local governments, federal action is essential to deal with major noise sources in commerce, control of which require national uniformity of treatment. The Environmental Protection Agency (EPA) is directed by Congress to coordinate the programs of all federal agencies relating to noise research and noise control. (EPA, 2023g)

##### 2. **Federal Transit Administration**

The Federal Transit Administration (FTA) has published a Noise and Vibration Impact Assessment (NVIA), which provides guidance for preparing and reviewing the noise and vibration sections of environmental documents. In the interest of promoting quality and uniformity in assessments, the NVIA is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The NVIA sets forth the methods and procedures for determining the level of noise and vibration impact resulting from most federally-funded transit projects and for determining what can be done to mitigate such impact. (FTA, 2006, p. 1-1)

The NVIA also establishes criteria for acceptable ground-borne vibration, which are expressed in terms of root mean square (rms) velocity levels in decibels and the criteria for acceptable ground-borne noise are expressed in terms of A-weighted sound levels. As shown in Table 4.7-3, *Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment*, the FTA identifies three categories of land uses and provides Ground-Based Vibration (GBV) and Ground-Based Noise (GBN) criteria for each category of land use. (FTA, 2006, pp. 8-3 and 8-4)



### 3. Federal Aviation Administration

The Federal Aviation Administration (FAA) regulates the maximum noise level that an individual civil aircraft can emit through requiring aircraft to meet certain noise certification standards. These standards designate changes in maximum noise level requirements by "stage" designation. The standard requires that the aircraft meet or fall below designated noise levels. For civil jet aircraft, there are four stages identified, with Stage 1 being the loudest and Stage 4 being the quietest. For helicopters, two different stages exist, Stage 1 and Stage 2. As with civil jet aircraft, Stage 2 is quieter than Stage 1. In addition, the FAA is currently working to adopt the latest international standards for helicopters, which will be called Stage 3 and will be quieter than Stage 2. (FAA, 2022a)

**Table 4.7-3 Ground-Borne Vibration and Ground-Borne Noise Impact Criteria for General Assessment**

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch /sec)			GBN Impact Levels (dB re 20 micro Pascals)		
	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>
<b>Category 1:</b> Buildings where vibration would interfere with interior operations.	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
<b>Category 2:</b> Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
<b>Category 3:</b> Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

**Notes:**

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
5. Vibration-sensitive equipment is generally not sensitive to ground-borne noise.

(FTA, 2006, Table 8-1)

The FAA has undertaken a phase out of older, noisier civil aircraft, resulting in some stages of aircraft no longer being in the fleet. Currently within the contiguous US, civil jet aircraft over 75,000 pounds maximum take-off weight must meet Stage 3 and Stage 4 to fly. In addition, aircraft at or under 75,000 pounds maximum take-off weight must meet Stage 2, 3, or 4 to operate within the U.S. In addition, by December 31, 2015, all



civil jet aircraft, regardless of weight must meet Stage 3 or Stage 4 to fly within the contiguous U.S. Both Stage 1 and Stage 2 helicopters are allowed to fly within the U.S. (FAA, 2022a)

The current FAA noise standards applicable to new type certifications of jet and large turboprop aircraft is Stage 4. It is equivalent to the ICAO Annex 16, Volume 1 Chapter 4 standards. Recently, the international community has established and approved a more stringent standard within the ICAO Annex 16, Volume 1 Chapter 14, which became effective July 14, 2014. The FAA is adopting this standard and promulgating the rule for Stage 5 that is anticipated to be effective for new type certificates after December 31, 2017 and December 31, 2020, depending on the weight of the aircraft. The Notice of Proposed Rule Making (NPRM) for Stage 5 was published on January 14, 2016. (FAA, 2022b)

For helicopters, the FAA has noise standards for a Stage 3 helicopter that became effective on May 5, 2014. These more stringent standards apply to new type helicopters and are consistent with ICAO Annex 16, Volume 1 Chapter 8 and Chapter 11. (FAA, 2022b)

The FAA Modernization and Reform Act of 2012, in Section 513, had a prohibition on operating certain aircraft weighing 75,000 pounds or less not complying with Stage 3 noise levels, and on July 2, 2013, the FAA published a Final Rule in the Federal Register for the *Adoption of Statutory Prohibition the Operation of Jets Weighing 75,000 Pounds or Less That Are Not Stage 3 Noise Compliant*. In 1990, Congress passed the Aviation Noise and Capacity Act, which required that by the year 2000 all jet and large turboprop aircraft at civilian airports be Stage 3. (FAA, 2022b)

#### **4. Federal Highway Administration**

The Federal Highway Administration (FHWA) is the agency responsible for administering the federal-aid highway program in accordance with federal statutes and regulations. The FHWA developed the noise regulations as required by the Federal-Aid Highway Act of 1970 (Public Law 91-605, 84 Stat. 1713). The regulation, 23 CFR 772 *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, applies to highway construction projects where a state department of transportation has requested federal funding for participation in the project. The regulation requires the highway agency to investigate traffic noise impacts in areas adjacent to federally-aided highways for proposed construction of a highway on a new location or the reconstruction of an existing highway to either significantly change the horizontal or vertical alignment or increase the number of through-traffic lanes. If the highway agency identifies impacts, it must consider abatement. The highway agency must incorporate all feasible and reasonable noise abatement into the project design. (FHWA, 2022)

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in Title 23 of the United States Code of Federal Regulations Part 772. The regulations require the following during the planning and design of a highway project:

- Identification of traffic noise impacts;
- Examination of potential mitigation measures;
- The incorporation of reasonable and feasible noise mitigation measures into the highway project; and



- Coordination with local officials to provide helpful information on compatible land use planning and control. (FHWA, 2022)

The regulations contain noise abatement criteria, which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require meeting the abatement criteria in every instance. Rather, they require highway agencies make every reasonable and feasible effort to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of federal-aid highway funds for construction or reconstruction of a highway. (FHWA, 2022)

## **5. Construction-Related Hearing Conservation**

The Occupational Safety and Health Administration (OSHA) hearing conservation program is designed to protect workers with significant occupational noise exposures from hearing impairment even if they are subject to such noise exposures over their entire working lifetimes. Standard 29 CFR, Part 1910 indicates the noise levels under which a hearing conservation program is required to be provided to workers exposed to high noise levels. (OSHA, 2002) This analysis does not evaluate the noise exposure of construction workers within the Development Site based on CEQA requirements, and instead, evaluates the Project-related construction noise levels at the nearby sensitive receiver locations in the Project study area. Further, periodic exposure to high noise levels in short duration, such as Project construction, is typically considered an annoyance and not impactful to human health. It would take several years of exposure to high noise levels to result in hearing impairment.

### **B. Local Regulations**

#### **1. City of San Bernardino Noise Element**

The City of San Bernardino General Plan Noise Element identifies several policies to minimize the impacts of excessive noise levels throughout the community. The Noise Element provides policy guidance which addresses the generation, mitigation, avoidance, and the control of excessive noise. To protect City of San Bernardino residents from excessive noise levels, the Noise Element contains the following three goals and associated policies: (UC, 2024e, p. 13)

- 14.1 Ensure that residents are protected from excessive noise through careful land planning.
  - 14.1.1 Minimize, reduce, or prohibit, as may be required, the new development of housing, health care facilities, schools, libraries, religious facilities, and other noise sensitive uses in areas where existing or future noise levels exceed an Ldn of 65 dB(A) exterior and an Ldn of 45 dB(A) interior if the noise cannot be reduced to these levels.
  - 14.1.2 Require that automobile and truck access to commercial properties abutting residential parcels be located at the maximum practical distance from the residential parcel.
  - 14.1.3 Require that all parking for commercial uses abutting residential areas be enclosed within a structure, buffered by walls, and/or limited hours of operation.



- 14.1.4 Prohibit the development of new or expansion of existing industrial, commercial, or other uses that generate noise impacts on housing, schools, health care facilities or other sensitive uses above a Ldn of 65 dB(A).
- 14.2 Encourage the reduction of noise from transportation-related noise sources such as motor vehicles, aircraft operations, and railroad movements.
  - 14.2.1 Work with Caltrans to landscape or install mitigation elements along freeways and highways adjacent to existing residential subdivisions or noise-sensitive uses to reduce noise impacts.
  - 14.2.2 Employ noise mitigation practices when designing future streets and highways, and when improvements occur along existing road segments. Mitigation measures should emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.
  - 14.2.3 Require that development that increases the ambient noise level adjacent to noise-sensitive land uses provide appropriate mitigation measures.
  - 14.2.4 Maintain roadways so that the paving is in good condition and free of cracks, bumps, and potholes.
  - 14.2.5 Require sound walls, berms, and landscaping along existing and future highways and railroad right-of-ways to beautify the landscape and reduce noise.
  - 14.2.6 Buffer residential neighborhoods from noise caused by train operations and increasing high traffic volumes along major arterials and freeways.
  - 14.2.7 Require heliports/helistops to comply with Federal Aviation Administration standards.
  - 14.2.8 Minimize noise attributable to vehicular travel in residential neighborhoods by inhibiting through trips by the use of cul-de-sacs, one-way streets, and other traffic controls.
  - 14.2.9 Enforce sections of the California Vehicle Code related to mufflers and modified exhaust systems.
  - 14.2.10 Provide for the development of alternate transportation modes such as bicycle paths and pedestrian walkways to minimize the number of automobile trips.
  - 14.2.11 Require that new equipment and vehicles purchased by the City comply with noise performance standards consistent with the best available noise reduction technology.
  - 14.2.12 Require that commercial and industrial uses implement transportation demand management programs consistent with the Air Quality Management Plan that provide incentives for car pooling, van pools, and the use of public transit to reduce traffic and associated noise levels in the City.
  - 14.2.13 Work with local agencies and businesses to provide public transit services that reduce traffic and associated noise.



- 14.2.14 Work with public transit agencies to ensure that the buses, vans, and other vehicles used do not generate excessive noise levels.
- 14.2.15 Work with all railroad operators in the City to properly maintain lines and establish operational restrictions during the early morning and late evening hours to reduce impacts in residential areas and other noise sensitive areas.
- 14.2.16 Work with all railroad operators to install noise mitigation features where operations impact existing adjacent residential or other noise-sensitive uses.
- 14.2.17 Ensure that new development is compatible with the noise compatibility criteria and noise contours as defined in the Comprehensive Land Use Plan for the SBIA and depicted in Figure LU-4.
- 14.2.18 Limit the development of sensitive land uses located within the 65 decibel (dB) Community Noise Equivalent Level (CNEL) contour, as defined in the Comprehensive Land Use Plan for the SBIA and depicted in Figure LU-4.
- 14.2.19 As may be necessary, require acoustical analysis and ensure the provision of effective noise mitigation measures for sensitive land uses, especially residential uses, in areas significantly impacted by noise.
- 14.3 Protect residents from the negative effects of “spill over” or nuisance noise.
  - 14.3.1 Require that construction activities adjacent to residential units be limited as necessary to prevent adverse noise impacts.
  - 14.3.2 Require that construction activities employ feasible and practical techniques that minimize the noise impacts on adjacent uses.
  - 14.3.3 Adopt and enforce a standard for exterior noise levels for all commercial uses that prevents adverse levels of discernible noise on adjoining residential properties.
  - 14.3.4 Adopt and enforce a standard for exterior noise levels from the use of leaf blowers, motorized lawn mowers, parking lot sweepers, or other high-noise equipment on commercial properties if their activity will result in noise that adversely affects abutting residential parcels.
  - 14.3.5 Require that the hours of truck deliveries to commercial properties abutting residential uses be limited unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at another hour.
  - 14.3.6 Ensure that buildings are constructed soundly to prevent adverse noise transmission between differing uses located in the same structure and individual residences in multifamily buildings.
  - 14.3.7 Require that commercial uses in structures containing residences on upper floors not be noise intensive.
  - 14.3.8 Require common walls and floors between commercial and residential uses be constructed to minimize the transmission of noise and vibration.



The noise policies specified in the City of San Bernardino Noise Element provide the guidelines necessary to satisfy these goals. To ensure that residents are not exposed to excessive noise levels (Goal 14.1), Policies 14.1.1 to 14.1.4 (listed above) indicate that sensitive land uses such as housing, health care facilities, schools, libraries, and religious facilities should not experience exterior noise levels greater than 65 dBA LDN for exterior areas and 45 dBA LDN for interior areas. Policies 14.2.1 to 14.2.19 (listed above) outline the transportation-related guidelines and mitigation strategies the City uses to satisfy Goal 14.2. To protect residents from sources of operational and construction noise (Goal 14.3), the Noise Element includes Policies 14.3.1 to 14.3.8 (listed above) to adopt a Noise Ordinance and ensure noise issues between land uses are reduced. (UC, 2024e, pp. 13-14)

To encourage the reduction of noise from transportation-related noise sources such as motor vehicles, aircraft operations and railroad movements (Goal 14.2), Table N-3 of the City of San Bernardino General Plan Noise Element, shown on Table 4.7-4, *Interior and Exterior Noise Standards*, identifies a maximum allowable exterior noise level of 65 dBA CNEL and an interior noise level limit of 45 dBA CNEL for new residential developments. While the City specifically identifies an exterior noise level limit for noise-sensitive residential land uses such as hotels, hospitals, schools, and parks, the City of San Bernardino does not maintain exterior noise standards for non-noise sensitive land uses such as manufacturing, warehousing, wholesale, and utilities. (UC, 2024e, p. 14)

## **2. City of San Bernardino Noise Ordinance**

Noise impacts within the City of San Bernardino are governed by the City of San Bernardino Municipal Code, Section 8.54. Section 8.54.070 of the City of San Bernardino Municipal Code indicates that construction activity is restricted to the hours within 7:00 a.m. and 8:00 p.m. The City of San Bernardino Development Code, Section 19.20.030 indicates: *No vibration associated with any use shall be permitted which is discernible beyond the boundary line of the property.* With respect to operational noise sources, Section 8.54.060 states when: *such noises are an accompaniment and effect of a lawful business, commercial or industrial enterprise carried on in an area zoned for that purpose...these activities shall be exempt* (Section 8.54.060(B)). However, Development Code, Section 19.20.030.15(A), limits the operational stationary-source noise from development projects to an exterior noise level of 65 dBA Leq for residential land use. (UC, 2024e, p. 17; City of San Bernardino, 2023a; City of San Bernardino, 2023b)

## **3. City of Highland Noise Standards**

The adopted City of Highland Municipal Code does not identify any quantifiable exterior noise level standards for non-transportation (stationary) noise sources. Therefore, the analysis herein relies on the City of San Bernardino Development Code noise standards to assess the noise impacts for receivers located within the City of Highland.



**Table 4.7-4 Interior and Exterior Noise Standards**

<i>Land Use</i>		<i>CNEL (dBA)</i>	
<i>Categories</i>	<i>Uses</i>	<i>Interior</i> <sup>1</sup>	<i>Exterior</i> <sup>2</sup>
Residential	Single and multi-family, duplex	45 <sup>3</sup>	65
	Mobile homes	----	65 <sup>4</sup>
Commercial	Hotel, motel, transient housing	45	---
	Commercial retail, bank, restaurant	55	---
	Office building, research and development, professional offices	50	---
	Amphitheater, concert hall, auditorium, movie theater	45	---
	Gymnasium (Multipurpose)	50	---
	Sports Club	55	---
	Manufacturing, warehousing, wholesale, utilities	65	---
	Movie Theaters	45	---
Institutional/ Public	Hospital, school classrooms/playgrounds	45	65
	Church, library	45	---
Open Space	Parks	---	65

<sup>1</sup> Indoor environment excluding: bathrooms, kitchens, toilets, closets, and corridors

<sup>2</sup> Outdoor environment limited to:

- Private yard of single-family dwellings
- Multi-family private patios or balconies accessed from within the dwelling (Balconies 6 feet deep or less are exempt)
- Mobile home parks
- Park picnic areas
- School playgrounds
- Hospital patios

<sup>3</sup> Noise level requirement with closed windows, mechanical ventilation or other means of natural ventilation shall be provided as per Chapter 12, Section 1205 of the Uniform Building Code.

<sup>4</sup> Exterior noise levels should be such that interior noise levels will not exceed 45 dBA CNEL.

Source: City of San Bernardino General Plan Noise Element, Table N-3.

Source: (UC, 2024e, Exhibit 3-B)

#### 4.7.4 BASIS FOR DETERMINING SIGNIFICANCE

##### A. Thresholds of Significance

Based on the results of the initial study, it was determined that the Project has the potential to result in a significant impact due to noise if the Project or any Project-related component would:

- a. *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; or*
- b. *Result in the generation of excessive groundborne vibration or groundborne noise levels.*

The above-listed thresholds are derived directly from Section XIII. of Appendix G to the State CEQA Guidelines and address the typical, adverse effects related to noise and vibration that could result from



development projects. Refer also to the Project's Initial Study (*Technical Appendix A*) and EIR subsection 5.4.11 for a discussion of potential impacts due to airport-related noise that were determined to be less than significant as part of the Project's scoping process.

## **B. Significance Criteria**

Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise level increase represents a significant adverse environmental impact. In effect, there is no single noise increase that renders the noise impact significant. Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted – the so-called ambient environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. (UC, 2024e, p. 21)

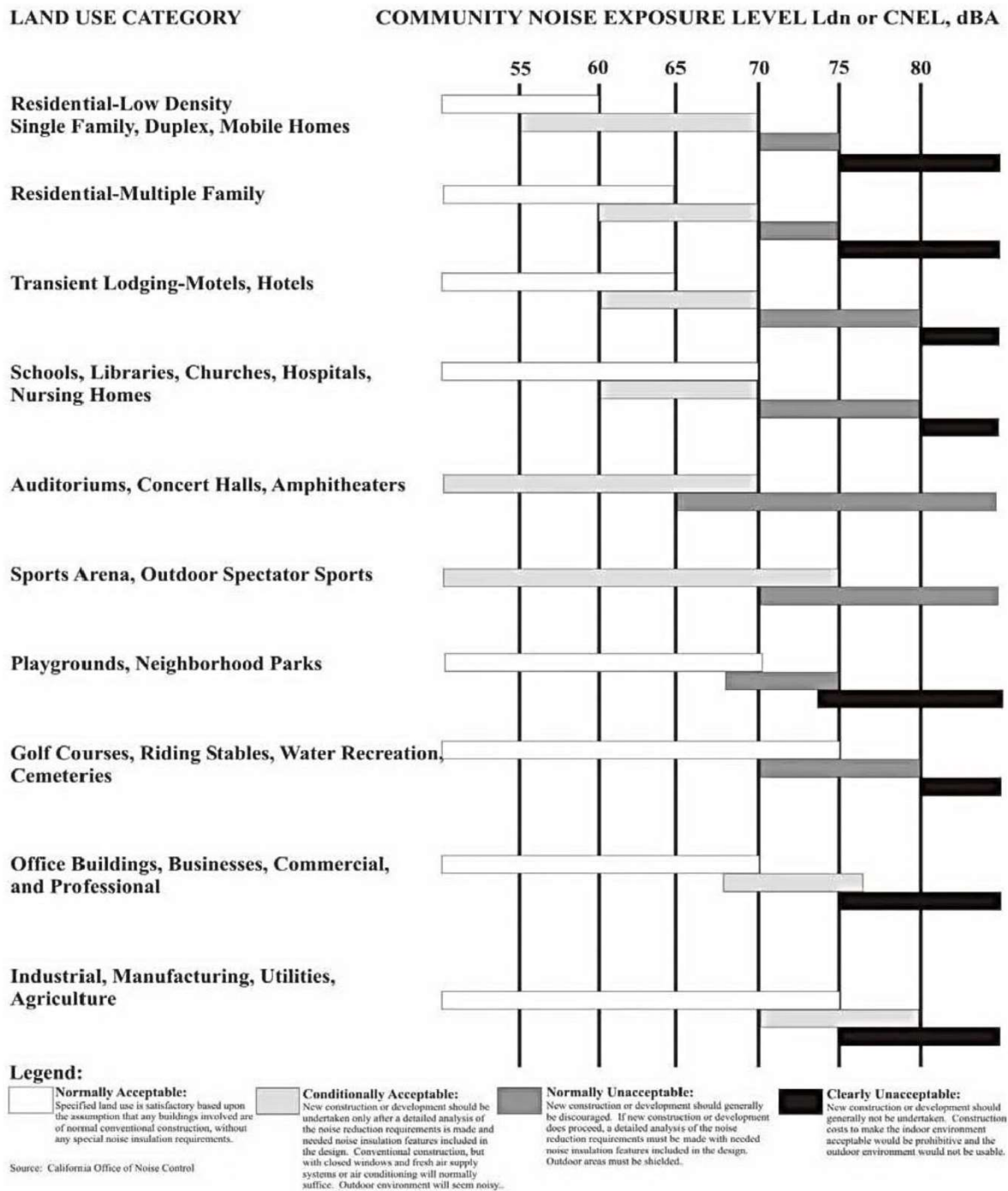
### **1. Significance Criteria for Project Operations (On-Site Operational- and Off-Site Traffic-Related Noise)**

The City of San Bernardino General Plan Noise Element, Figure N-1, *Land Use Compatibility for Community Noise Exposure* was used to establish the satisfactory noise levels of significance for non-noise-sensitive land uses in the Project study area. The City's standards are based in part of the State of California noise requirements. OPR identifies suggested land use noise compatibility levels as part of its General Plan Guidelines. The guidelines identify normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses, as summarized below in Table 4.7-5, *Land Use Compatibility for Community Noise Exposure*. As shown, the *normally acceptable* exterior noise level for non-noise-sensitive land use is 70 dBA CNEL. Noise levels greater than 70 dBA CNEL are considered *conditionally acceptable* per the *Land Use Compatibility for Community Noise Exposure*. As also shown in Table 4.7-5, noise levels affecting single-family residential receptors are considered *normally acceptable* at noise levels up to 60 dBA CNEL, and are considered *conditionally acceptable* at noise levels up to 70 dBA CNEL. Noise levels affecting multi-family residential and hotel/lodging uses are considered *normally acceptable* at noise levels up to 65 dBA CNEL, and *conditionally acceptable* at noise levels up to 70 dBA CNEL. Noise levels affecting other sensitive receptor types, such as schools, libraries, churches, hospitals, and nursing homes, are considered *normally acceptable* at noise levels up to 70 dBA CNEL and also are considered *conditionally acceptable* at noise levels up to 70 dBA CNEL. (UC, 2024e, p. 22)

The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of



Table 4.7-5 Land Use Compatibility for Community Noise Exposure



(City of San Bernardino, 2005a, Figure N-1)

cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (Leq). (UC, 2024e, p. 21)



The analysis within this Subsection recognizes that there is no universally applicable standard that renders a noise impact significant. For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in baseline ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project (baseline) noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or readily perceptible, 3 dBA or barely perceptible, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance at noise sensitive receiver locations are consistent with guidance provided by both the Federal Highway Administration and Caltrans. (UC, 2024e, pp. 21-22)

## 2. **Significance Criteria for Project Construction-Related Noise**

Neither the City of San Bernardino General Plan Noise Element nor its Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a *substantial temporary or periodic noise increase*. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. Per the FTA, construction-related noise impacts would be potentially significant if nearby sensitive receptors are exposed to daytime construction-related noise levels exceeding 80 dBA Leq, while nighttime construction related noise would be potentially significant if nearby sensitive receptors are exposed to nighttime noise levels exceeding 65 dBA Leq. (UC, 2024e, p. 17)

## 3. **Summary of Significance Criteria**

In summary, noise impacts shall be considered significant if the Project were to exceed the noise level thresholds identified in Table 4.7-6, *Significance Criteria Summary*.

### 4.7.5 METHODOLOGY FOR CALCULATING PROJECT-RELATED NOISE IMPACTS

#### A. **Sensitive Receiver Locations**

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Figure 4.7-2, *Receiver Locations*, were identified as representative locations for analysis. Sensitive receivers generally are defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses generally are considered to include schools, hospitals, single-family dwellings, mobile home parks, churches,



**Table 4.7-6 Significance Criteria Summary**

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Transportation-Related Noise	Noise-Sensitive <sup>1</sup>	If ambient is < 60 dBA Leq <sup>1</sup>	≥ 5 dBA Leq Project increase	
		If ambient is 60 - 65 dBA Leq <sup>1</sup>	≥ 3 dBA Leq Project increase	
		If ambient is > 65 dBA Leq <sup>1</sup>	≥ 1.5 dBA Leq Project increase	
	Non-Noise-Sensitive <sup>2</sup>	if ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
On-Site Operational-Related Noise	Noise-Sensitive <sup>1</sup>	Exterior Noise Level Limit <sup>3</sup>	65 dBA Leq	
		If ambient is < 60 dBA Leq <sup>1</sup>	≥ 5 dBA Leq Project increase	
		If ambient is 60 - 65 dBA Leq <sup>1</sup>	≥ 3 dBA Leq Project increase	
		If ambient is > 65 dBA Leq <sup>1</sup>	≥ 1.5 dBA Leq Project increase	
Construction-Related Noise	Noise-Sensitive <sup>1</sup>	Restricted to the hours within 7:00 a.m. and 8:00 p.m. <sup>4</sup>		
		Noise Level Threshold <sup>5</sup>	80 dBA Leq	65 dBA Leq
		Vibration Level Threshold <sup>6</sup>	0.3 PPV (in/sec)	

<sup>1</sup> FICON, 1992.

<sup>2</sup> City of San Bernardino General Plan Noise Element, Figure N-1.

<sup>3</sup> City of San Bernardino Development Code, Section 19.20.030.15(A).

<sup>4</sup> Section 8.54.070 of the City of San Bernardino Municipal Code.

<sup>5</sup> Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual.

<sup>6</sup> Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.

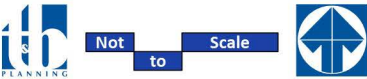
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

(UC, 2024e, Table 4-1)



Source(s): Urban Crossroads (10-26-2023)

Figure 4.7-2



Sensitive Receiver Locations



libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals. (UC, 2024e, p. 45)

Operational on-site noise associated with the proposed Project would include noise associated with loading dock activity, roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, and truck movements. To describe the potential off-site noise levels attributable to on-site Project operations, five receiver locations in the vicinity of the Project Site were identified. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as discussed above. Other sensitive land uses in the Project study area that are located at greater distances than those identified below would experience lower noise levels than those presented herein due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the Project Site boundary to each receiver location. (UC, 2024e, p. 45)

- R1: Location R1 represents the existing noise sensitive residence at 7926 Sterling Avenue, approximately 123 feet west of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receiver R1 is placed at the building façade. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment. (UC, 2024e, p. 45)
- R2: Location R2 represents the existing noise sensitive residence at 7890 Sterling Avenue, approximately 181 feet northwest of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receiver R2 is placed at the building façade. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment. (UC, 2024e, p. 45)
- R3: Location R3 represents the existing noise sensitive Bella Apartment community at 7832 Sterling Avenue, approximately 501 feet northwest of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receiver R3 is placed at the building façade. A 24-hour noise measurement was taken near this location, L3, to describe the existing ambient noise environment. (UC, 2024e, p. 45)
- R4: Location R4 represents the existing noise sensitive Villa De La Rosa Apartment community at 7862 Lankershim Avenue, approximately 361 feet northeast of the Project Site. Since there are no private outdoor living areas (backyards) facing the Project Site, receiver R4 is placed at the building façade. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment. (UC, 2024e, p. 45)
- R5: Location R5 represents the existing noise sensitive residence at 7974 Lankershim Avenue, approximately 495 feet east of the Project Site. Since there are no private outdoor living areas



(backyards) facing the Project Site, receiver R5 is placed at the building façade. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment. (UC, 2024e, p. 47)

## **B. Construction Noise Analysis Methodology**

### **1. Typical Construction Activities**

The FTA *Transit Noise and Vibration Impact Assessment Manual* recognizes that construction projects are accomplished in several different stages and outlines the procedures for assessing noise impacts during construction. Each stage has a specific equipment mix, depending on the work to be completed during that stage. As a result of the equipment mix, each stage has its own noise characteristics; some stages have higher continuous noise levels than others, and some have higher impact noise levels than others. The Project construction activities are expected to occur in the following stages: site preparation, grading, building construction, paving, and architectural coating. (UC, 2024e, p. 57)

To describe construction noise activities, the construction noise analysis was prepared using reference construction equipment noise levels from the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), which includes a national database of construction equipment reference noise emission levels. The RCNM equipment database, provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation. (UC, 2024e, p. 57)

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. Consistent with FTA guidance for general construction noise assessment, Table 4.7-7, *Construction Reference Noise Levels*, presents the combined noise levels for the loudest construction equipment, assuming they operate at the same time. Appendix 10.1 to the Project's NIA (*Technical Appendix K*) includes the detailed CadnaA construction noise model inputs. (UC, 2024e, p. 59)

### **2. Nighttime Concrete Pouring Activities**

To estimate the noise levels due to nighttime concrete pouring activities, sample reference noise level measurements were taken during a nighttime concrete pouring at a construction site. Urban Crossroads collected short-term nighttime concrete pour reference noise level measurements during the noise-sensitive nighttime hours between 1:00 a.m. to 2:00 a.m. at 27334 San Bernardino Avenue in the City of Redlands. The reference noise levels describe the expected concrete pour noise sources that may include concrete mixer truck movements and pouring activities, concrete paving equipment, rear mounted concrete mixer truck backup alarms, engine idling, air brakes, generators, and workers communicating/whistling. To describe the nighttime concrete pour noise levels associated with the construction of the proposed Project, this analysis relies on reference sound pressure level of 67.7 dBA Leq at 50 feet representing a sound power level of 100.3 dBA Lw.



**Table 4.7-7 Construction Reference Noise Levels**

Construction Stage	Reference Construction Equipmnet <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )	Composite Reference Noise Level (dBA L <sub>eq</sub> ) <sup>2</sup>	Reference Power Level (dBA L <sub>w</sub> ) <sup>3</sup>
Site Preparation	Tractor	80	84.0	115.6
	Backhoe	74		
	Grader	81		
Grading	Scraper	80	83.3	114.9
	Excavator	77		
	Dozer	78		
Building Construction	Crane	73	80.6	112.2
	Generator	78		
	Front End Loader	75		
Paving	Paver	74	77.8	109.5
	Dump Truck	72		
	Roller	73		
Architectural Coating	Man Lift	68	76.2	107.8
	Compressor (air)	74		
	Generator (<25kVA)	70		
Nighttime Concrete Pouring	N/A <sup>2, 4</sup>	N/A <sup>2</sup>	67.7	100.3

<sup>1</sup> FHWA Road Construction Noise Model.

<sup>2</sup> With exception of nighttime concrete pouring, represents the combined noise level for all equipment assuming they operate at the same time consistent with FTA Transit Noise and Vibration Impact Assessment guidance. For nighttime concrete pouring activities, reference noise level measurements were collected by Urban Crossroads during the noise-sensitive nighttime hours between 1:00 a.m. to 2:00 a.m. at 27334 San Bernardino Avenue in the City of Redlands.

<sup>3</sup> Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings.

<sup>4</sup> Combined noise level of concrete mixer truck movements and pouring activities, concrete paving equipment, rear mounted concrete mixer truck backup alarms, engine idling, air brakes, generators, and workers communicating. (UC, 2024e, Table 10-1)

While the Project noise levels would depend on the actual duration of activities and specific equipment fleet in use at the time of construction, the reference sound power level of 100.3 dBA L<sub>w</sub> is used to describe the expected Project nighttime concrete pour noise activities. (UC, 2024e, p. 62)

### **C. Operational Noise Analysis Methodology**

The operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project Site. Consistent with similar warehouse uses, the Project business operations primarily would be conducted within the enclosed building, except for traffic movement, parking, as well as loading and unloading of trucks at designated loading bays. The on-site Project-related noise sources are expected to include: loading dock activity, roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, and truck movements. (UC, 2024e, p. 49)

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project.



The reference noise level measurements shown on Table 4.7-8, *Reference Operational Noise Level Measurements*, used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the reasonable worst-case noise environment with the typical noise sources operating at the same time. These sources of noise activity will likely vary throughout the day. (UC, 2024e, p. 49)

**Table 4.7-8 Reference Operational Noise Level Measurements**

Noise Source <sup>1</sup>	Noise Source Height (Feet)	Min./ Hour <sup>2</sup>		Reference Noise Level (dBA L <sub>eq</sub> ) @ 50 Feet	Sound Power Level (dBA) <sup>3</sup>
		Day	Night		
Loading Dock Activity	8'	60	60	62.8	103.4
Roof-Top Air Conditioning Units	5'	39	28	57.2	88.9
Trash Enclosure Activity	5'	10	10	57.3	89.0
Parking Lot Vehicle Movements	5'	60	60	56.1	87.8
Truck Movements	8'	60	60	59.8	93.2

<sup>1</sup> As measured by Urban Crossroads, Inc.

<sup>2</sup> Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project Site. "Daytime" = 7:00 a.m. - 8:00 p.m.; "Nighttime" = 8:00 p.m. - 7:00 a.m.

<sup>3</sup> Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources. (UC, 2024e, Table 9-1)

## **D. Traffic Noise Analysis Methodology**

### **1. FHWA Traffic Noise Prediction Model**

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads using a computer program that replicates the FHWA Traffic Noise Prediction Model- FHWA-RD-77-108. The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (UC, 2024e, p. 29)

Table 6-1 of the Project's NIA (*Technical Appendix K*) presents the roadway parameters used to assess the Project's off-site transportation noise impacts. NIA Table 6-1 identifies the 16 off-site study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications



per the City of San Bernardino General Plan Circulation Element, and the posted vehicle speeds. To describe the Project off-site traffic impacts, the receiving land use adjacent to each roadway segment is identified as a sensitive or non-sensitive land use. Sensitive land uses are limited to existing noise sensitive residential uses based on a review of aerial imagery. It is expected that existing receivers will perceive a change in the ambient noise levels over time. The ADT volumes used in this study area presented on NIA Table 6-2 are based on the Project's Traffic Analysis ("TA"; EIR *Technical Appendix LI*) for the following traffic scenarios: (UC, 2024e, p. 29)

- Existing Conditions (E)
- Existing Conditions plus Project (E+P)
- Existing plus Ambient (EA) (2026) Conditions
- Existing plus Ambient plus Project (EAP) (2026) Conditions
- Existing plus Ambient plus Cumulative (EAC) (2026) Conditions
- Existing plus Ambient plus Cumulative Plus Project (EAPC) (2026) Conditions

The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of project traffic distributions. This analysis relies on a comparative evaluation of the off-site traffic noise impacts at the boundary of the right-of-way of the receiving adjacent land use, without and with project ADT traffic volumes from the Project's TA. The Project is anticipated to generate a net total of 782 two-way trips per day (actual vehicles) that includes 124 truck trips. (UC, 2024e, p. 30)

To quantify the off-site noise levels, the Project-related truck trips were added to the heavy truck category in the FHWA noise prediction model. The addition of the Project related truck trips increases the percentage of heavy trucks in the vehicle mix. This approach recognizes that the FHWA noise prediction model is significantly influenced by the number of heavy trucks in the vehicle mix. Table 6-3 of the Project's NIA (*Technical Appendix K*) provides the time of day (daytime, evening, and nighttime) vehicle splits. The daily Project truck trip-ends were assigned to the individual off-site study area roadway segments based on the Project truck trip distribution percentages documented in the Project's TA. Using the Project truck trips in combination with the Project trip distribution, Urban Crossroads calculated the number of additional Project truck trips and vehicle mix percentages for each of the study area roadway segments. Table 6-4 of the Project's NIA shows the traffic flow by vehicle type (vehicle mix) used for all without Project traffic scenarios, and NIA Tables 6-5 to 6-8 show the vehicle mixes used for the "with Project" traffic scenarios. (UC, 2024e, p. 30)

Due to the added Project truck trips, the increase in Project traffic volumes and the distributions of trucks on the study area road segments, the percentage of autos, medium trucks and heavy trucks will vary for each of the traffic scenarios. This explains why the existing and future traffic volumes and vehicle mixes vary between seemingly identical study area roadway segments. (UC, 2024e, p. 32)

## **2. Traffic Noise Contours**

To assess the off-site transportation CNEL noise level impacts associated with development of the proposed Project, noise contours were developed based on the Project's TA. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were



used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at receiving land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area. Tables 7-1 through 7-6 of the Project's NIA present a summary of the exterior traffic noise levels without barrier attenuation for each traffic condition. (UC, 2024e, p. 35)

#### **E. Construction Vibration Methodology**

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Ground vibration levels associated with various types of construction equipment are summarized on Table 4.7-9, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA.

**Table 4.7-9 Vibration Source Levels for Construction Equipment**

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089
Vibratory Roller	0.210

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual  
(UC, 2024e, Table 10-5)

#### **4.7.6 IMPACT ANALYSIS**

***Threshold 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 ordinance, or applicable standards of other agencies?***

The analysis presented on the following pages summarizes the Project's potential construction noise levels and operational noise levels, including operational noise that would be generated on-site as well as off-site noise that would be generated by Project-related traffic. The detailed noise calculations for the analysis presented here are provided in Appendices 7.1 through 10.2 of the Project's NIA (*Technical Appendix K*).



☐ **Construction-Related Noise Impacts**

**Typical Construction Activities**

With the exception of potential concrete pouring activities that would occur during nighttime hours and that are discussed separately below, the Project's construction activities would occur during daytime hours in conformance with Section 8.54.070 of the City of San Bernardino Municipal Code. Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. As shown on Table 4.7-10, *Construction Equipment Noise Level Summary*, the construction noise levels are expected to range from 44.8 to 58.7 dBA L<sub>eq</sub> at the nearby receiver locations. The construction noise analysis shows that the nearest receiver locations would satisfy the reasonable daytime 80 dBA L<sub>eq</sub> significance threshold during Project construction activities as shown on Table 4.7-11, *Construction Noise Level Compliance*. Therefore, the noise impacts due to Project construction noise would be less than significant at all receiver locations. (UC, 2024e, p. 59)

**Table 4.7-10 Construction Equipment Noise Level Summary**

Receiver Location <sup>1</sup>	Construction Noise Levels (dBA L <sub>eq</sub> )					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels <sup>2</sup>
R1	58.7	58.0	55.3	52.6	50.9	58.7
R2	56.1	55.4	52.7	50.0	48.3	56.1
R3	52.6	51.9	49.2	46.5	44.8	52.6
R4	53.6	52.9	50.2	47.5	45.8	53.6
R5	52.0	51.3	48.6	45.9	44.2	52.0

<sup>1</sup> Construction noise source and receiver locations are shown on Figure 4.7-2.

<sup>2</sup> Construction noise level calculations based on distance from the construction activity, which is measured from the Project Site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1 to the Project's NIA (Technical Appendix K).  
(UC, 2024e, Table 10-2)

**Table 4.7-11 Construction Noise Level Compliance**

Receiver Location <sup>1</sup>	Construction Noise Levels (dBA L <sub>eq</sub> )		
	Highest Construction Noise Levels <sup>2</sup>	Threshold <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
R1	58.7	80	No
R2	56.1	80	No
R3	52.6	80	No
R4	53.6	80	No
R5	52.0	80	No

<sup>1</sup> Construction noise source and receiver locations are shown on Figure 4.7-2.

<sup>2</sup> Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations as shown on Table 4.7-10.

<sup>3</sup> Construction noise level thresholds as shown on Table 4.7-6.

<sup>4</sup> Do the estimated Project construction noise levels exceed the construction noise level threshold?

(UC, 2024e, Table 10-3)



### ***Off-Site Roadway and Utility Improvements***

To support the Project development, there will be grading, trenching, and paving for off-site improvements associated with roadway construction and utility installation for the Project. It is expected that these off-site improvements will be constructed within the existing public right-of-way (ROW) on 5<sup>th</sup> Street, 6<sup>th</sup> Street, 7<sup>th</sup> Street, 9<sup>th</sup> Street, and Sterling Avenue. The loudest phase of construction associated with off-site roadway and utility improvements would likely be trenching activities, which would generate no greater noise levels than would the grading/excavation phase of the proposed Project's on-site construction activities previously outlined on Table 4.7-7. (UC, 2024e, p. 61)

It is expected that the off-site construction activities would not take place at any one location for more than four days due to the nature of the linear construction activity. Construction noise from this off-site work would, therefore, be relatively short-term and the noise levels would be reduced as construction work moves linearly along the selected alignment and farther from sensitive uses. Although not required to address a potentially significant impact, CRDR 4.7.2, which generally requires compliance with Section 8.54.070 of the City of San Bernardino Municipal Code and specifies construction-related measures to reduce Project construction-related noise levels at off-site sensitive receptors, such as locating construction equipment as far from sensitive receptors as possible, would further reduce construction noise impacts from the Project construction and the off-site roadway and utility improvements. With the implementation of CRDR 4.7.2, noise from construction and off-site roadway and utility improvements would be reduced. Given the expected short-term noise levels, noise would fall below levels of significance and off-site roadway and utility improvement construction activities would be less than significant. (UC, 2024e, p. 61)

### ***Nighttime Concrete Pouring Activities***

Nighttime concrete pouring activities likely would occur as a part of Project building construction activities. Nighttime concrete pouring activities are often used to support reduced concrete mixer truck transit times and lower air temperatures than during the daytime hours and are generally limited to the actual building pad area. The nighttime concrete pours would take place outside the permitted hours specified by Section 8.54.070 the City of San Bernardino Municipal Code, which indicates that construction activity is restricted to the hours within 7:00 a.m. and 8:00 p.m. The Project Applicant would be required to obtain authorization for nighttime work from the City of San Bernardino. (UC, 2024e, pp. 61-62)

As shown on Table 4.7-12, *Nighttime Concrete Pour Noise Level Compliance*, the noise levels associated with the nighttime concrete pour activities are estimated to range from 37.3 to 43.4 dBA Leq and would satisfy the City of San Bernardino stationary-source exterior hourly average Leq residential noise level threshold of 65 dBA Leq at all the receiver locations. Based on the results of the analysis, all nearest noise receiver locations would experience less-than-significant impacts due to the Project related nighttime concrete pour activities. Appendix 10.2 to the Project's NIA (*Technical Appendix K*) includes the CadnaA nighttime concrete pour noise model inputs. (UC, 2024e, p. 62)



**Table 4.7-12 Nighttime Concrete Pour Noise Level Compliance**

Receiver Location <sup>1</sup>	Concrete Pour Construction Noise Levels (dBA L <sub>eq</sub> )		
	Exterior Noise Levels <sup>2</sup>	Threshold <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
R1	43.4	65	No
R2	40.8	65	No
R3	37.3	65	No
R4	38.3	65	No
R5	36.7	65	No

<sup>1</sup> Construction noise source and receiver locations are shown on Figure 4.7-2.

<sup>2</sup> Nighttime Concrete Pour noise model inputs are included in Appendix 10.2 to the Project's NIA (Technical Appendix K).

<sup>3</sup> Exterior nighttime noise level standards as shown on Table 4-7-5.

<sup>4</sup> Do the estimated Project construction noise levels exceed the construction noise level threshold?

(UC, 2024e, Table 10-4)

To describe the Project nighttime concrete noise level increases, the Project concrete pour noise levels were combined with the existing ambient noise levels measurements for the nearby receiver locations. Table 4.7-13, *Nighttime Concrete Pour Noise Level Increases*, shows that the Project nighttime concrete pour would generate a nighttime operational noise level increase ranging from 0.0 to 0.1 dBA L<sub>eq</sub> at the nearest receiver locations. Therefore, the incremental Project nighttime concrete pour noise level increase would be less than significant at all receiver locations.

**Table 4.7-13 Nighttime Concrete Pour Noise Level Increases**

Receiver Location <sup>1</sup>	Concrete Pour Noise Level <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels <sup>4</sup>	Combined Project and Ambient <sup>5</sup>	Project Increase <sup>6</sup>	Increase Criteria <sup>7</sup>	Increase Criteria Exceeded?
R1	43.4	L1	64.3	64.3	0.0	5.0	No
R2	40.8	L2	61.9	61.9	0.0	5.0	No
R3	37.3	L3	59.0	59.0	0.0	5.0	No
R4	38.3	L4	53.1	53.2	0.1	5.0	No
R5	36.7	L5	54.0	54.1	0.1	5.0	No

<sup>1</sup> See Figure 4.7-2 for the receiver locations.

<sup>2</sup> Nighttime concrete pour noise levels as shown on Table 4.7-12.

<sup>3</sup> Reference noise level measurement locations as shown on Figure 4.7-1.

<sup>4</sup> Observed nighttime ambient noise levels as shown on Table 4.7-2.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance increase criteria as shown on Table 4.7-6.



☐ **Operational-Related Noise Impacts**

**Project Operational Noise Levels**

Using the reference noise levels to represent the proposed Project operations that include loading dock activity, roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, and truck movements, Urban Crossroads calculated the operational source noise levels that are expected to be generated at the Project Site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 4.7-14, *Daytime Project Operational Noise Levels*, shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 8:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 35.6 to 45.7 dBA  $L_{eq}$ . (UC, 2024e, p. 53)

**Table 4.7-14 Daytime Project Operational Noise Levels**

Noise Source <sup>1</sup>	Operational Noise Levels by Receiver Location (dBA $L_{eq}$ )				
	R1	R2	R3	R4	R5
Loading Dock Activity	24.1	21.0	20.0	20.9	35.3
Roof-Top Air Conditioning Units	31.8	29.6	25.4	27.7	29.3
Parking Lot Vehicle Movements	45.1	41.0	35.0	34.4	31.8
Trash Enclosure Activity	22.5	11.3	10.0	12.2	27.5
Truck Movements	34.7	21.4	15.6	32.5	34.8
<b>Total (All Noise Sources)</b>	<b>45.7</b>	<b>41.4</b>	<b>35.6</b>	<b>37.2</b>	<b>39.7</b>

<sup>1</sup> See Exhibit 9-A of the Project's NIA (*Technical Appendix K*) for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1 to the NIA.  
(UC, 2024e, Table 9-2)

Table 4.7-15, *Nighttime Project Operational Noise Levels*, shows the Project operational noise levels during the nighttime hours of 8:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 35.4 to 45.6 dBA  $L_{eq}$ . The differences between the daytime and nighttime noise levels are largely related to the estimated duration of noise activity as shown in Table 4.7-8 and Appendix 9.1 to the Project's NIA (*Technical Appendix K*). (UC, 2024e, p. 53)

**Table 4.7-15 Nighttime Project Operational Noise Levels**

Noise Source <sup>1</sup>	Operational Noise Levels by Receiver Location (dBA $L_{eq}$ )				
	R1	R2	R3	R4	R5
Loading Dock Activity	24.1	21.0	20.0	20.9	35.3
Roof-Top Air Conditioning Units	29.4	27.2	23.0	25.2	26.9
Parking Lot Vehicle Movements	45.1	41.0	35.0	34.4	31.8
Trash Enclosure Activity	18.5	7.3	6.0	8.2	23.5
Truck Movements	34.7	21.4	15.6	32.5	34.8
<b>Total (All Noise Sources)</b>	<b>45.6</b>	<b>41.3</b>	<b>35.4</b>	<b>37.0</b>	<b>39.4</b>

<sup>1</sup> See Exhibit 9-A of the Project's NIA (*Technical Appendix K*) for the noise source locations. CadnaA noise model calculations are included in Appendix 9.1 to the NIA.  
(UC, 2024e, Table 9-3)



### Project Operational Noise Level Compliance

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of San Bernardino exterior noise level standards at nearby noise-sensitive receiver locations. Table 4.7-16, *Operational Noise Level Compliance*, shows the operational noise levels associated with the Project would satisfy the City of San Bernardino exterior noise level standards. Therefore, the Project's operational noise impacts would be less than significant at the nearby noise-sensitive receiver locations. (UC, 2024e, p. 54)

**Table 4.7-16 Operational Noise Level Compliance**

Receiver Location <sup>1</sup>	Project Operational Noise Levels (dBA Leq) <sup>2</sup>		Noise Level Standards (dBA Leq) <sup>3</sup>	Noise Level Standards Exceeded? <sup>4</sup>	
	Daytime	Nighttime		Daytime	Nighttime
R1	45.7	45.6	65	No	No
R2	41.4	41.3	65	No	No
R3	35.6	35.4	65	No	No
R4	37.2	37.0	65	No	No
R5	39.7	39.4	65	No	No

<sup>1</sup> See Figure 4.7-2 for the receiver locations.

<sup>2</sup> Proposed Project unmitigated operational noise levels as shown on Table 4.7-14 and Table 4.7-15.

<sup>3</sup> Exterior noise level standards, as shown on Table 4.7-6.

<sup>4</sup> Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 7:00 a.m. - 8:00 p.m.; "Nighttime" = 8:00 p.m. - 7:00 a.m.

(UC, 2024e, Table 9-4)

### Project Operational Noise Level Increases

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations potentially impacted by Project operational noise sources. Operational noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Table 4.7-17, *Daytime Project Operational Noise Level Increases*, and Table 4.7-18, *Nighttime Operational Noise Level Increases*, respectively. As indicated on Table 4.7-17, the Project is not expected to generate a measurable daytime operational noise level increase. Table 4.7-18 shows that the Project would generate a nighttime operational noise level increase ranging from 0.0 to 0.1 dBA Leq at the nearest receiver locations. Project-related operational noise level increases would satisfy the operational noise level increase significance criteria previously presented in Table 4.7-6; therefore, the operational noise increases at the sensitive receiver locations would be less than significant. (UC, 2024e, pp. 54-55)



**Table 4.7-17 Daytime Project Operational Noise Level Increases**

Receiver Location <sup>1</sup>	Total Project Operational Noise Level <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels <sup>4</sup>	Combined Project and Ambient <sup>5</sup>	Project Increase <sup>6</sup>	Increase Criteria <sup>7</sup>	Increase Criteria Exceeded?
R1	45.6	L1	66.8	66.8	0.0	1.5	No
R2	41.3	L2	66.3	66.3	0.0	1.5	No
R3	35.4	L3	66.1	66.1	0.0	1.5	No
R4	37.0	L4	59.9	59.9	0.0	5.0	No
R5	39.4	L5	59.2	59.2	0.0	5.0	No

<sup>1</sup> See Figure 4.7-2 for the receiver locations.

<sup>2</sup> Total Project daytime operational noise levels as shown on Table 4.7-14.

<sup>3</sup> Reference noise level measurement locations as shown on Figure 4.7-1.

<sup>4</sup> Observed daytime ambient noise levels as shown on Table 4.7-2.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance increase criteria as shown on Table 4.7-6.  
(UC, 2024e, Table 9-5)

**Table 4.7-18 Nighttime Operational Noise Level Increases**

Receiver Location <sup>1</sup>	Total Project Operational Noise Level <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels <sup>4</sup>	Combined Project and Ambient <sup>5</sup>	Project Increase <sup>6</sup>	Increase Criteria <sup>7</sup>	Increase Criteria Exceeded?
R1	45.6	L1	64.3	64.4	0.1	5.0	No
R2	41.3	L2	61.9	61.9	0.0	5.0	No
R3	35.4	L3	59.0	59.0	0.0	5.0	No
R4	37.0	L4	53.1	53.2	0.1	5.0	No
R5	39.4	L5	54.0	54.1	0.1	5.0	No

<sup>1</sup> See Figure 4.7-2 for the receiver locations.

<sup>2</sup> Total Project nighttime operational noise levels as shown on Table 4.7-15.

<sup>3</sup> Reference noise level measurement locations as shown on Figure 4.7-1.

<sup>4</sup> Observed nighttime ambient noise levels as shown on Table 4.7-2.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance increase criteria as shown on Table 4.7-6.  
(UC, 2024e, Table 9-6)

## ☐ **Traffic-Related Noise Impacts**

### **Existing with Project Traffic Noise Level Increases**

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included herein for informational purposes and to fully analyze all the existing traffic scenarios identified in the Project's TA (*Technical Appendix L1*). However, the analysis of existing off-site traffic noise levels plus traffic noise generated by the proposed Project scenario would not actually occur since the Project would not be fully constructed and operational until Year 2026 conditions. Table 7-1 of the Project's NIA (*Technical Appendix K*) shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise levels range from 64.4 to 75.3 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-2 of the Project's NIA shows the Existing with Project conditions



ranging from 64.7 to 75.3 dBA CNEL. Table 4.7-19, *Existing With Project Traffic Noise Level Increases*, shows that the Project off-site traffic noise level increases range from 0.0 to 0.6 dBA CNEL on the study area roadway segments. Based on the significance criteria for off-site traffic noise previously presented in Table 4.7-6, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases on receiving land uses due to the Project-related traffic. (UC, 2024e, p. 40)

**Table 4.7-19 Existing With Project Traffic Noise Level Increases**

ID	Road	Segment	Receiving Land Use <sup>1</sup>	CNEL at Receiving Land Use (dBA) <sup>1</sup>			Incremental Noise Level Increase Threshold <sup>2</sup>	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Arrowhead Av.	n/o Rialto Av.	Non-Sensitive	69.7	69.8	0.1	1.5	No
2	Arrowhead Av.	s/o Rialto Av.	Non-Sensitive	69.9	70.3	0.4	1.5	No
3	Arrowhead Av.	s/o Dwy. 2	Sensitive	73.4	74.0	0.6	1.5	No
4	Sierra Wy.	n/o Rialto Av.	Sensitive	68.1	68.1	0.0	1.5	No
5	Sierra Wy.	s/o Rialto Av.	Non-Sensitive	69.4	69.6	0.2	1.5	No
6	Sierra Wy.	s/o Dwy. 6	Sensitive	69.4	69.4	0.0	1.5	No
7	Rialto Av.	w/o Arrowhead Av.	Non-Sensitive	73.2	73.2	0.0	1.5	No
8	Rialto Av.	w/o Mountain View Av.	Non-Sensitive	73.4	73.7	0.3	1.5	No
9	Rialto Av.	e/o Mountain View Av.	Sensitive	73.3	73.5	0.2	1.5	No
10	Rialto Av.	w/o Sierra Wy.	Sensitive	73.9	74.0	0.1	1.5	No
11	Rialto Av.	e/o Sierra Wy.	Sensitive	72.5	72.5	0.0	1.5	No

<sup>1</sup> Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria (Table 4.7-6)?  
(UC, 2024e, Table 7-7)

#### ***Existing plus Ambient (EA) with Project Traffic Noise Level Increases (2026 Conditions)***

Table 7-3 of the Project's NIA (*Technical Appendix K*) presents the Existing plus Ambient (2026) without Project conditions CNEL noise levels. The EA (2026) without Project exterior noise levels range from 64.8 to 75.7 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. NIA Table 7-4 shows that the EA (2026) with Project conditions would range from 65.0 to 75.7 dBA CNEL. Table 4.7-20, *EA (2026) with Project Traffic Noise Level Increases*, shows that the Project off-site traffic noise level increases would range from 0.0 to 0.2 dBA CNEL. Based on the significance criteria for off-site traffic noise previously presented in Table 4.7-6, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases on receiving land uses due to the Project-related traffic. (UC, 2024e, p. 41)

#### ***Existing plus Ambient plus Cumulative (EAC) with Project Traffic Noise Level Increases (2026 Conditions)***

Table 7-5 of the Project's NIA (*Technical Appendix K*) presents the Existing plus Ambient plus Cumulative (2026) without Project conditions CNEL noise levels. The EAC (2026) without Project exterior noise levels



range from 65.2 to 75.9 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. NIA Table 7-6 shows that the EAC (2026) with Project conditions would range from 65.4 to 75.9 dBA CNEL. Table 4.7-21, *EAC (2026) with Project Traffic Noise Level Increases*, shows that the Project off-site traffic noise level increases would range from 0.0 to 0.2 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4.7-6, land uses adjacent to the study area roadway segments would experience less-than-significant noise level increases on receiving land uses due to the Project-related traffic. (UC, 2024e, p. 41)

**Table 4.7-20 EA (2026) with Project Traffic Noise Level Increases**

ID	Road	Segment	Receiving Land Use <sup>1</sup>	CNEL at Receiving Land Use (dBA) <sup>2</sup>			Incremental Noise Level Increase Threshold <sup>3</sup>	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Sterling Av.	n/o 6th St.	Sensitive	72.5	72.5	0.0	1.5	No
2	Sterling Av.	s/o 6th St.	Sensitive	73.4	73.4	0.0	1.5	No
3	Sterling Av.	s/o 5th St.	Sensitive	73.0	73.0	0.0	1.5	No
4	Lankershim Av.	n/o 6th St.	Sensitive	64.8	65.0	0.2	3.0	No
5	Victoria Av.	n/o 5th St.	Sensitive	73.5	73.5	0.0	1.5	No
6	Central Av.	n/o 5th St.	Sensitive	69.2	69.2	0.0	1.5	No
7	Palm Av.	n/o 5th St.	Sensitive	75.1	75.1	0.0	1.5	No
8	Palm Av.	s/o 5th St.	Non-Sensitive	75.7	75.7	0.0	3.0	No
9	6th St.	w/o Lankershim Av.	Sensitive	69.4	69.6	0.2	1.5	No
10	5th St.	w/o Sterling Av.	Sensitive	72.4	72.5	0.1	1.5	No
11	5th St.	w/o Lankershim Av.	Sensitive	71.5	72.3	0.8	1.5	No
12	5th St.	w/o Victoria Av.	Sensitive	71.4	72.2	0.8	1.5	No
13	5th St.	w/o Central Av.	Sensitive	73.6	74.1	0.5	1.5	No
14	5th St.	w/o Palm Av.	Sensitive	74.0	74.5	0.5	1.5	No
15	5th St.	e/o Palm Av.	Non-Sensitive	75.8	76.0	0.2	3.0	No
16	3rd St.	w/o Sterling Av.	Non-Sensitive	76.8	76.8	0.0	3.0	No

<sup>1</sup> Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria?

(UC, 2024e, Table 7-8)



Table 4.7-21 EAC (2026) with Project Traffic Noise Level Increases

ID	Road	Segment	Receiving Land Use <sup>1</sup>	CNEL at Receiving Land Use (dBA) <sup>2</sup>			Incremental Noise Level Increase Threshold <sup>3</sup>	
				No Project	With Project	Project Addition	Limit	Exceeded?
1	Sterling Av.	n/o 6th St.	Sensitive	73.1	73.1	0.0	1.5	No
2	Sterling Av.	s/o 6th St.	Sensitive	73.8	73.8	0.0	1.5	No
3	Sterling Av.	s/o 5th St.	Sensitive	73.1	73.1	0.0	1.5	No
4	Lankershim Av.	n/o 6th St.	Sensitive	65.2	65.4	0.2	1.5	No
5	Victoria Av.	n/o 5th St.	Sensitive	73.6	73.6	0.0	1.5	No
6	Central Av.	n/o 5th St.	Sensitive	69.5	69.5	0.0	1.5	No
7	Palm Av.	n/o 5th St.	Sensitive	75.3	75.3	0.0	1.5	No
8	Palm Av.	s/o 5th St.	Non-Sensitive	75.9	75.9	0.0	3.0	No
9	6th St.	w/o Lankershim Av.	Sensitive	69.4	69.6	0.2	1.5	No
10	5th St.	w/o Sterling Av.	Sensitive	73.0	73.2	0.2	1.5	No
11	5th St.	w/o Lankershim Av.	Sensitive	72.6	73.2	0.6	1.5	No
12	5th St.	w/o Victoria Av.	Sensitive	72.5	73.1	0.6	1.5	No
13	5th St.	w/o Central Av.	Sensitive	74.3	74.7	0.4	1.5	No
14	5th St.	w/o Palm Av.	Sensitive	75.0	75.4	0.4	1.5	No
15	5th St.	e/o Palm Av.	Non-Sensitive	76.3	76.6	0.3	3.0	No
16	3rd St.	w/o Sterling Av.	Non-Sensitive	76.8	76.8	0.0	3.0	No

<sup>1</sup> Based on a review of existing aerial imagery. Noise sensitive uses limited to existing residential land uses.

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>3</sup> Does the Project create an incremental noise level increase exceeding the significance criteria?

(UC, 2024e, Table 7-9)

***Threshold b.: Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?***

☐ **Construction-Related Vibration Impacts**

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Based on the representative vibration levels previously presented in Table 4.7-9 for various construction equipment types, it is possible to estimate the potential for human response (annoyance) and building damage using the following vibration assessment methods defined by the FTA. Table 4.7-22, *Project Construction Vibration Levels* presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 123 to 501 feet from Project Site construction activities, construction vibration velocity levels are estimated to range from 0.002 to 0.019 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec), the typical Project construction vibration levels would fall below the building damage thresholds at all the noise sensitive receiver



locations. Therefore, the Project-related vibration impacts would be less than significant during construction activities at the Project Site. (UC, 2024e, p. 63)

**Table 4.7-22 Project Construction Vibration Levels**

Location <sup>1</sup>	Distance to Const. Activity (Feet) <sup>2</sup>	Typical Construction Vibration Levels PPV (in/sec) <sup>3</sup>						Thresholds PPV (in/sec) <sup>4</sup>	Thresholds Exceeded? <sup>5</sup>
		Small bulldozer	Jack-hammer	Loaded Trucks	Large bulldozer	Vibratory Roller	Highest Vibration Level		
R1	123'	0.000	0.003	0.007	0.008	0.019	0.019	0.3	No
R2	181'	0.000	0.002	0.004	0.005	0.011	0.011	0.3	No
R3	501'	0.000	0.000	0.001	0.001	0.002	0.002	0.3	No
R4	361'	0.000	0.001	0.001	0.002	0.004	0.004	0.3	No
R5	495'	0.000	0.000	0.001	0.001	0.002	0.002	0.3	No

<sup>1</sup> Construction noise source and receiver locations are shown on Figure 4.7-2.

<sup>2</sup> Distance from receiver to limits of construction activity.

<sup>3</sup> Based on the Vibration Source Levels of Construction Equipment (Table 4.7-9).

<sup>4</sup> Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Table 19, p. 38.

<sup>5</sup> Does the peak vibration exceed the acceptable vibration thresholds?

"PPV" = Peak Particle Velocity

(UC, 2024e, Table 10-6)

#### **Operational-Related Vibration Impacts**

Under long-term conditions, the Project would not include or require equipment or activities that would result in perceptible groundborne vibration beyond the Project Site. Trucks would travel to and from the Project Site along local roadways; however, vibration levels for heavy trucks operating at the posted speed limits on paved surfaces are not perceptible beyond the roadway. Caltrans has issued a publication entitled, "Transportation Construction Vibration Guidance Manual," dated April 2020 (Caltrans, 2020). As noted by Caltrans:

*"Because vehicles traveling on highway are supported on flexible suspension systems and pneumatic tires, these vehicles are not an efficient source of ground vibration. They can, however, impart vibration into the ground when they roll over pavement that is not smooth. Continuous traffic traveling on a smooth highway creates a fairly continuous but relatively low level of vibration. Where discontinuities exist in the pavement, heavy truck passages can be the primary source of localized, intermittent vibration peaks. These peaks typically last no more than a few seconds and often for only a fraction of a second. Because vibration drops off rapidly with distance, there is rarely a cumulative increase in ground vibration from the presence of multiple trucks."* (Caltrans, 2020, p. 10)

All trucks generated by the Project would travel along City roadways that are regularly maintained to prevent discontinuous pavement (e.g., potholes). As such, and based on guidance from Caltrans, the Project's operational traffic-related vibration impacts would be less than significant.



#### 4.7.7 CUMULATIVE IMPACTS

As indicated in the analysis of Threshold a., construction noise levels would approach a maximum of 58.7 dBA Leq at the nearest sensitive receptor (Receptor R1). As previously depicted on EIR Figure 4.0-1, there are several cumulative projects within close proximity to the Project Site. In the event that construction on the Project Site occurs simultaneously with construction of other nearby projects, the effect to sensitive receptors in proximity to the Project Site would not be cumulatively considerable in consideration of the existing built environment. Specifically, 6<sup>th</sup> Street, 5<sup>th</sup> Street, and Sterling Avenue separate the Project Site from other development projects that may be under construction to the north, south, and west, respectively. Additionally, there are existing developments (i.e., buildings) between the Project Site and all of the cumulative developments shown on EIR Figure 4.0-1, meaning that there would not be any direct line-of-sight between the Project Site and these cumulative developments. As such, any noise generated on these cumulative development sites would not substantially contribute to the ambient noise levels at the Project Site. Furthermore, sound levels attenuate (or decrease) at a rate of 6 dB for each doubling of distance from a point source (UC, 2024e, p. 8).

Based on the reference noise levels previously presented on Table 4.7-7, assuming the highest cumulative reference level of 84.0 dBA Leq at 50 feet, and not taking into consideration shielding from existing buildings, construction related noise levels at the nearest cumulative development (3rd Street & Central Avenue), located approximately 1,380 feet southeast of the Project Site, would contribute worst-case noise levels at the Project Site of up to 55 dBA Leq. Noise levels of only 55 dBA Leq would not contribute to Project-related construction noise levels such that the 80 dBA Leq threshold would be exceeded. Moreover, the noise levels previously identified in Table 4.7-11 shows that daytime construction activities only would expose nearby sensitive receptors to noise levels up to 58.7 dBA Leq, which is well below the identified threshold of significance of 80 dBA Leq; thus, even if Project-related construction noise was combined with construction-related noise sources in the surrounding area, the Project still would not expose any nearby sensitive receptors to noise levels exceeding 80 dBA Leq.

Additionally, due to the relatively short time period in which nighttime concrete pouring activities would be required it is highly unlikely that Project-related nighttime concrete pouring activities would occur at the same time as nighttime construction is occurring on nearby properties. Moreover, Table 4.7-12 demonstrates that noise from Project-related concrete pouring activities would range up to 43.4 dBA Leq, which is well below the identified threshold of significance of 65 dBA Leq, while Table 4.7-13 shows that the Project nighttime concrete pour would generate a nighttime operational noise level increase ranging from 0.0 to 0.1 dBA Leq at the nearest receiver locations. Thus, even in the unlikely circumstance in which Project nighttime concrete pouring activities occur at the same time as nighttime construction activities at nearby cumulative developments, the Project still would not expose any nearby sensitive receptors to nighttime noise levels exceeding 65 dBA Leq. Accordingly, there is no potential for the Project to contribute to the exposure of nearby sensitive receptors to significant temporary (construction-related) increases in daytime or nighttime ambient noise levels.

The operational noise analysis presented for Threshold “a” addresses the Project’s contribution of noise to existing cumulative noise sources (i.e., ambient noise) in the Project area. As previously shown in Table 4.7-



17 and Table 4.7-18, the Project's noise contribution would not be perceptible to noise-sensitive receptors in the Project area during daytime or nighttime hours. Therefore, because the Project has a less-than-significant direct operational noise impact, the Project's permanent operational noise impacts would not be cumulatively considerable.

The analysis presented under Threshold "a" also evaluates the Projects' traffic noise contribution along study area roadways with consideration of cumulative development. The data previously presented in Table 4.7-20 and Table 4.7-21 shows that even when considering traffic from ambient growth and cumulative developments, the Project would not expose any nearby sensitive receptors to noise levels exceeding the County's thresholds of significance. Accordingly, cumulatively-considerable impacts associated with traffic-related noise from buildout of the Project would be less than significant.

As evaluated under the analysis of Threshold "b", Project construction-related activities would reach vibration levels up to 0.019 PPV at the nearest sensitive receptor, which is well below the threshold of significance of 0.3 PPV. Based on the Project's relatively low levels of construction-related vibration, Project construction activities would not have the potential to cause or contribute to significant vibration impacts at the nearest sensitive receptors. Thus, construction-related vibration impacts would be less-than-cumulatively considerable. Additionally, truck traffic under long-term operational conditions would generate vibration levels that are well below the identified threshold of significance of 0.3 PPV, as Project-related traffic is anticipated to travel along improved roadways that are regularly maintained by the City so as to generally be free from potholes and other uneven surfaces. Accordingly, Project-related operational vibration impacts would be less-than-cumulatively considerable.

#### 4.7.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Less-than-Significant Impact. The nearest receiver locations would not be exposed to Project-related construction noise levels exceeding the reasonable daytime 80 dBA  $L_{eq}$  significance threshold or the reasonable nighttime threshold of 65 dBA  $L_{eq}$  during Project construction activities, even when considering the addition of nighttime concrete pouring activities in the context of ambient noise levels (as shown in Table 4.7-13). Project operational activities would not expose any nearby sensitive receptors to noise levels exceeding the City's threshold of significance of 65 dBA  $L_{eq}$ , during daytime or nighttime operations. In addition, Project-related traffic noise increases would not expose any sensitive receptors to noise level increases exceeding the identified thresholds of significance. Accordingly, the proposed Project would not 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, and impacts would be less than significant requiring no mitigation.

Threshold b: Less-than-Significant Impact. Project construction activities would expose nearby sensitive receptors to construction vibration velocity levels ranging from 0.002 to 0.019 in/sec PPV, which is well below the identified threshold of significance of 0.3 PPV. Additionally, the Project does not include any land uses with the potential to generate substantial amounts of groundborne noise or vibration. Accordingly, the Project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant.



#### 4.7.9 CITY REGULATIONS, DESIGN REQUIREMENTS, AND MITIGATION

##### *Applicable City Regulations and Design Requirements*

The following are CRDRs that apply to the proposed Project and that reduce or preclude noise impacts. Although these requirements technically do not meet CEQA's definition for mitigation, they are imposed herein to ensure Project compliance with applicable City regulations, design requirement, and best practices.

CRDR 4.7.1 The Project shall comply with all the requirements of the Chapter 8.54, *Noise Control*, of the City of San Bernardino Municipal Code regarding noise, including the following specific requirements:

- With exception of nighttime concrete pouring activities, all construction activities shall comply with Section 8.54.070 of the City of San Bernardino Municipal Code, limiting construction activity to the hours within 7:00 a.m. and 8:00 p.m.
- As required pursuant to Municipal Code Section 8.54.060 (Exemptions), the Project Applicant is required to obtain a valid written agreement with the City of San Bernardino to authorize concrete pouring activities during construction of the proposed warehouse building during nighttime hours (i.e., between 8:00 p.m. and 7:00 a.m.).
- As required by Section 8.54.020(C) (Prohibited Acts) of the City of San Bernardino Municipal Code, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.
- As required pursuant to Section 8.54.020(C) (Prohibited Acts) of the City of San Bernardino Municipal Code, no music or electronically reinforced speech from construction workers shall be allowed.

#### 4.7.10 MITIGATION

Although Project impacts due to noise would be less than significant, and although not identified herein to address any of the Project's significant environmental effects, the following mitigation measure nonetheless has been identified to ensure that measures are undertaken to reduce the Project's construction- and operational-related noise levels to the maximum feasible extent.

MM 4.7-1: During construction of the Project, the following provisions shall apply to reduce the Project's construction-related noise at nearby sensitive receptors to the maximum feasible extent:

- All stationary construction equipment shall be placed in such a manner so that the emitted noise is directed away from any sensitive receivers.
- Construction equipment staging areas shall be located at the greatest feasible distance between the staging area and the nearest sensitive receivers.
- The construction contractor shall limit equipment and material deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. to 8:00 p.m.).
- Electrically powered air compressors and similar power tools shall be used, when feasible, in place of diesel equipment.



## 4.8 TRANSPORTATION

The analysis in this Subsection is primarily based on two reports prepared by Urban Crossroads, Inc. titled, 1) “5<sup>th</sup> & Sterling Traffic Analysis” (herein, “TA”), dated September 22, 2023 (Urban Crossroads, 2023f); and 2) “5<sup>th</sup> and Sterling Avenue Vehicle Miles Traveled (VMT) Analysis” (herein, “VMT Analysis”), dated March 8, 2024 (UC, 2024g). The reports are included as *Technical Appendices L1 and L2*, respectively, to this EIR. The Project’s traffic analysis was prepared in accordance with the City of San Bernardino’s Public Works Department *Traffic Impact Analysis Guidelines* (August 2020), the California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies*, and through consultation with both the City of San Bernardino and City of Highland staff during the scoping process. The Project’s VMT analysis is prepared in accordance with the *City of San Bernardino Traffic Impact Analysis Guidelines* (August 2020). Refer to Section 7.0, *References*, for a complete list of references.

This Subsection assesses transportation impacts resulting from implementation of the Project. In accordance with Senate Bill (SB) 743, further discussed under Subsection 4.8.3 below, the California Natural Resources Agency (CNRA) adopted changes to the CEQA Guidelines in December 2018, which identify that starting on July 1, 2020, vehicle miles traveled (VMT) is the appropriate metric to evaluate a project’s transportation impacts. As of July 1, 2020, automobile delay, as measured by “level of service” (LOS) and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts.

Notwithstanding the VMT method of analysis for CEQA purposes, the City of San Bernardino traffic study guidelines require a traffic analysis based on LOS, which the City uses in part to determine transportation improvement obligations of development projects. In addition, the City of San Bernardino General Plan’s Circulation Element discusses LOS and General Plan Policy 6.2.1 (Policy 6.2.1) states: “Maintain a peak hour level of service D or better at street intersections.” For this reason, and although LOS cannot be used to make a conclusion of a significant environmental effect, a traffic study was nonetheless required for the Project and is briefly discussed herein for informational purposes.

Based on analyses conducted as part of the Project’s Initial Study, the substantive evidence cited in the Initial Study (EIR *Technical Appendix A*), and comments received in response to the Project’s Notice of Preparation, the City determined that the Project would clearly result in no impacts or less-than-significant impacts under two of the thresholds identified in Section XVII (Transportation) of Appendix G to the CEQA Guidelines. Specifically, the Project’s Initial Study concluded that the Project would result in less-than-significant impacts under the following thresholds of significance:

- c. *Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- d. *Would the Project result in inadequate emergency access?*

Accordingly, and based on the analysis contained in the Project’s Initial Study (EIR *Technical Appendix A*) and in EIR Subsection 5.4.15, no additional analysis of the above-listed thresholds is required, and this



Subsection instead focuses on the Project's potential to result in significant VMT-related traffic impacts associated with Project-generated traffic.

This Subsection focuses on the Project's potential to adversely affect the remaining thresholds of significance under Section XVII (Transportation) of Appendix G to the CEQA Guidelines:

- a. Would the Project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*
- b. Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

#### **4.8.1 EXISTING TRANSPORTATION SYSTEM**

##### **A. Existing Roadway System**

The Project Site is located north of 5<sup>th</sup> Street, east of Sterling Avenue, south of 6<sup>th</sup> Street, and west of a mix of commercial and single-family residential land uses and Lankershim Avenue. Existing traffic on nearby roadways consist of both passenger vehicle and trucks passing through the area and accessing nearby land uses. The primary regional vehicular travel routes serving the Project area are Interstate 215 (I-215) freeway, which is located approximately 3.3 miles west of the Project Site; Interstate 10 (I-10), which is located approximately 2.8 miles south of the Project Site; and State Route 210 (SR-210), which is located 1.8 miles north and 2.1 miles to the east of the Project Site (Google Earth, 2023).

##### **B. Existing Truck Routes**

The City of San Bernardino's General Plan does not designate truck routes. The City of Highland General Plan identifies Sterling Avenue, which abuts the Project Site to the west, 5<sup>th</sup> Street, which abuts the Project Site to the south, and 3<sup>rd</sup> Street, approximately 0.1-mile south of the Project Site, as designated truck routes (City of Highland, 2006, Exhibit 3-4).

##### **C. Existing Transit Services**

The vicinity of the proposed Project is served primarily by OmniTrans, a public transit agency serving various jurisdictions within San Bernardino County. The nearest route to the Project Site is OmniTrans Route 15, which currently runs along 9<sup>th</sup> Street and Victoria Avenue. The nearest transit stop along OmniTrans Route 15 is located approximately 0.3-mile north of the Project Site at the intersection of Sterling Avenue and 9<sup>th</sup> Street. (Urban Crossroads, 2023f, Exhibit 3-6; Google Earth, 2023)

##### **D. Existing Bicycle and Pedestrian Facilities**

Field observations collected by Urban Crossroads indicate light pedestrian and bicycle activity near the Project Site. The City of San Bernardino has designated 5<sup>th</sup> Street as a bicycle route, and the City of Highland has designated Sterling Avenue as a bicycle route. Sidewalks are located along the westbound side of 6<sup>th</sup> Street beginning near the northeast corner of the Project Site along the frontage of Weber Logistics and the eastbound



side of 6<sup>th</sup> Street along the frontage of Armada Towing. No trails abut the Project Site; however, there is an existing regional multi-purpose trail located along 3<sup>rd</sup> Street south of the Project Site. (Urban Crossroads, 2023f, Exhibit 3-4)

#### 4.8.2 EXISTING TRAFFIC CONDITIONS

##### A. Existing Vehicle Miles Traveled

The San Bernardino County Transportation Authority (SBCTA) provides VMT calculations for baseline and cumulative model conditions for each of its member agencies. The data provided by the SBCTA includes a ratio of the total VMT within an area to the area's service population, which is defined as the total number of employees and residents. The City of San Bernardino's General Plan Buildout VMT is calculated at an estimated 31.6 VMT per service population. (UC, 2024g, p. 3)

##### B. Existing Traffic Counts

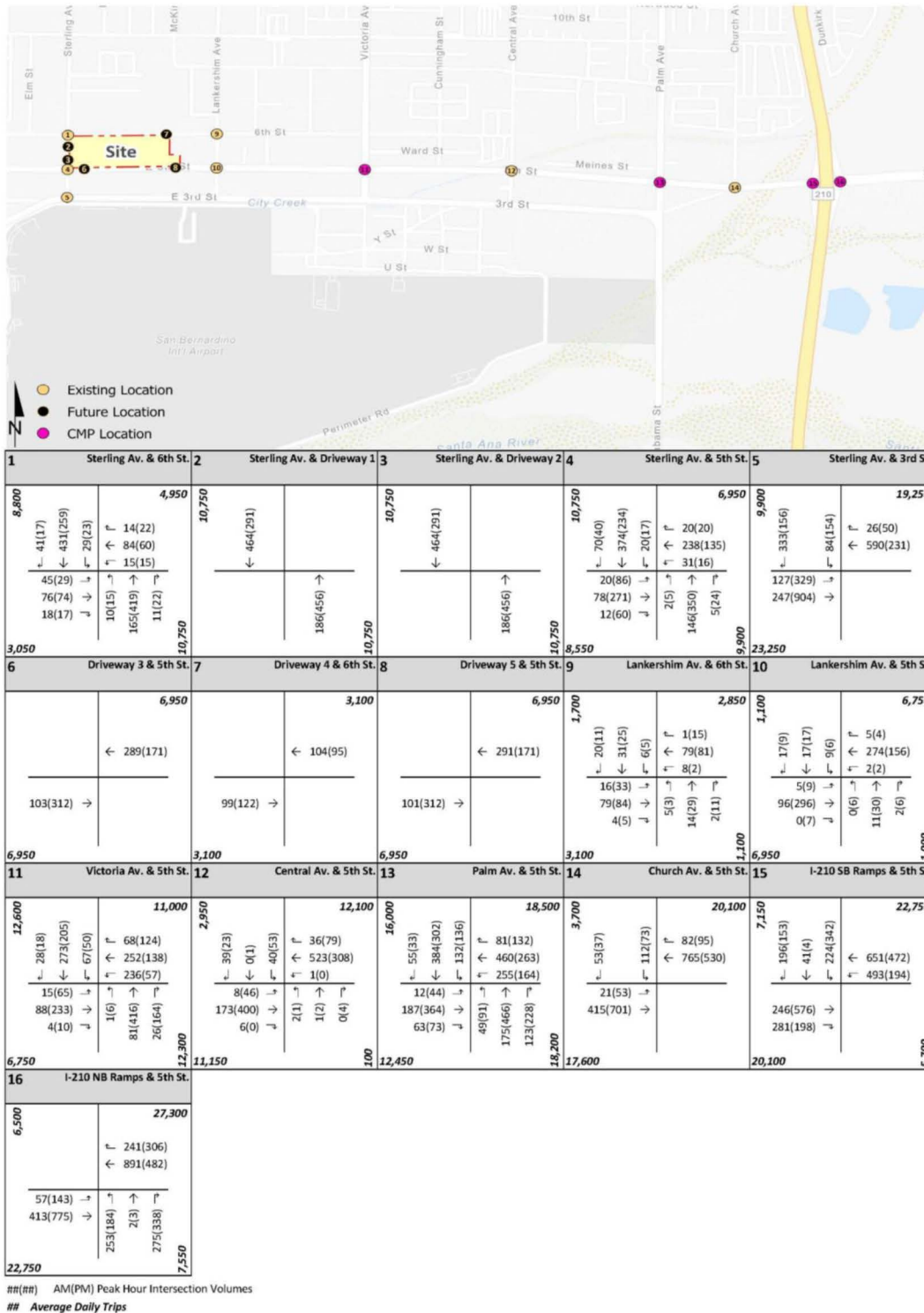
Urban Crossroads collected traffic count data in May 2023 during the weekday AM peak hours between 7:00 AM and 9:00 AM, and weekday PM peak hours between 4:00 PM and 6:00 PM. The 2023 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. As such, no additional adjustments were made to the traffic counts to establish the baseline condition. (Urban Crossroads, 2023f, p. 30)

To represent the effect large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into passenger car equivalent (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is also much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For this analysis, the following PCE factors have been used to estimate each turning movement: 2.0 for 2-axle trucks, 2.5 for 3-axle trucks, and 3.0 for 4+-axle trucks. These factors are consistent with the values recommended for use in the City's Guidelines. (Urban Crossroads, 2023f, p. 30)

Existing weekday average daily traffic (ADT) volumes on local roadways throughout the Project Study Area as well as the existing AM and PM peak hour intersection volumes are shown on Figure 4.8-1, *Existing (2023) Traffic Volumes (Actual Vehicles)*. Except where specifically noted, all of the vehicle trips/traffic volumes presented in this EIR Subsection, including those illustrated on Figure 4.8-1, are shown in terms of PCE.

#### 4.8.3 REGULATORY SETTING

The following is a brief description of the federal, State, and local environmental laws and related regulations related to the issue of transportation.



Source(s): Urban Crossroads (10-11-2023)

Figure 4.8-1



Not to Scale



Existing (2023) Traffic Volumes (Actual Vehicles)



**A. State Regulations**

**1. Complete Streets Act – Assembly Bill 1358 (AB 1358)**

In September 2008, Governor Schwarzenegger signed into law Assembly Bill 1358 (AB 1358), the Complete Streets Act. AB 1358 requires that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan. By requiring new duties of local officials, AB 1358 imposes a State-mandated local program. AB 1358 required the Office of Planning and Research (OPR) to prepare or amend guidelines for a legislative body to accommodate the safe and convenient travel of users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the general plan, and in doing so to consider how appropriate accommodation varies depending on its transportation and land use context. AB 1358 authorized OPR, in developing these guidelines, to consult with leading transportation experts, including, but not limited to, bicycle transportation planners, pedestrian planners, public transportation planners, local air quality management districts, and disability and senior mobility planners. (CA Legislative Info, 2008)

**2. Statewide Transportation Improvement Program (STIP)**

The Statewide Transportation Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. STIP programming generally occurs every two years. The programming cycle begins with the release of a proposed fund estimate in July of odd-numbered years, followed by California Transportation Commission (CTC) adoption of the fund estimate in August (odd years). The fund estimate serves to identify the amount of new funds available for the programming of transportation projects. Once the fund estimate is adopted, Caltrans and the regional planning agencies prepare transportation improvement plans for submittal by December 15th (odd years). Caltrans prepare the Interregional Transportation Improvement Plan (ITIP) and regional agencies prepare Regional Transportation Improvement Plans (RTIPs). Public hearings are held in January (even years) in both northern and southern California. The STIP is adopted by the CTC by April (even years). (Caltrans, n.d.)

**3. Senate Bill 743 and VMT Based Analysis**

Senate Bill 743, which was codified in Public Resources Code (PRC) Section 21099, required changes to the CEQA Guidelines regarding the analysis of transportation impacts. Pursuant to PRC Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” To that end, in developing the criteria, the Office of Planning and Research (OPR) proposed, and the CNRA certified and adopted changes to the CEQA Guidelines in December 2018, which entailed changes to the thresholds of significance for the evaluation of impacts to transportation.

The updated CEQA Guidelines include the addition of CEQA Guidelines Section 15064.3, of which Subdivision b establishes criteria for evaluating a project’s transportation impacts based on project type and



using automobile VMT as the metric. As identified in Section 15064.3(b)(4) of the CEQA Guidelines, a lead agency has the discretion to choose the most appropriate methodology to evaluate a project's impacts due to VMT. The City of San Bernardino adopted its VMT thresholds of significance and published its updated *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment* on June 18, 2020. Pursuant to SB 743 and PRC Section 21099, congestion impacts of a development project (i.e., LOS) generally no longer constitutes a significant environmental effect under CEQA as of July 1, 2020. (Pub. Resources Code, § 21099, subd. (b)(3).). Therefore, an analysis of congestion impacts, including analysis of impacts related to the LOS of the circulation system is provided in EIR *Technical Appendix L1* only for information purposes. The metric for determining a significant impact under CEQA is based on VMT.

#### **4. Senate Bill 325 - Transportation Development Act (Mills-Alquist-Deddeh Act; SB 325)**

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. TDA established two funding sources: the Local Transportation Fund (LTF), and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes. (Caltrans, n.d.)

### **B. Local and Regional Regulations**

#### **1. SCAG Regional Transportation Plan/Sustainable Communities Strategy**

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code § 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project site is within SCAG's regional authority. In April 2024, SCAG adopted the *2024-2050 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS)* ("RTP/SCS"); also referred to herein as "Connect SoCal" with goals to: 1) build and maintain an integrated multimodal transportation network; 2) develop, connect and sustain communities that are livable and thriving; 3) create a healthy region for the people of today and tomorrow; and 4) support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents. Performance measures and funding strategies also are included to ensure that the adopted goals are achieved through implementation of the RTP.

Connect SoCal includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. Connect SoCal also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided in a direct response to Senate Bill 375 (SB 375) which was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use,



housing, and environmental planning. Connect SoCal is updated periodically to allow for the consideration and inclusion of new transportation strategies and methods.

## **2. San Bernardino County Measure “I”**

Measure “I,” a one-half of one percent sales tax on retail transactions, was approved by San Bernardino County voters in 1989 and extended by County voters in 2004 to remain effective through the year 2040. While Measure “I” is a self-executing sales tax, it bears discussion here because the funds raised through Measure “I” have funded in the past and will continue to fund new transportation facilities in San Bernardino County, including within the City of San Bernardino. The revenue generated by Measure “I” is to be used to fund transportation projects including, but not limited to, roadway improvements, commuter rail, public transit, and other identified improvements. Measure “I” also required that a local traffic impact fee be created to ensure that development projects are paying a fair share for transportation projects from which they would benefit (see discussion of “City of San Bernardino Development Impact Fee,” below). Revenues collected through local traffic impact fee programs are used in tandem with regional Measure “I” revenues to fund projects identified in the SANBAG Development Mitigation Nexus Study (included as Appendix G to the San Bernardino County Congestion Management Program). (Urban Crossroads, 2023f, p. 66)

## **3. City of San Bernardino Development Impact Fee (DIF) Program**

The City of San Bernardino created its Development Impact Fee (DIF) program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding local improvements necessary to accommodate expected local growth, as identified in the City’s General Plan. The identification and nomination of specific roadway and intersection improvement projects and the disbursement of DIF fees to fund capital improvement programs is overseen by the City’s Engineering Department. (Urban Crossroads, 2023f, p. 65)

## **4. City of San Bernardino General Plan Circulation**

The General Plan for the City of San Bernardino contains a Circulation Element that is intended to guide the development of the local circulation system in a manner that is compatible with the land plan in the respective General Plan Land Use Element. To help meet projected future traffic demands and achieve balanced growth, the City has adopted specific transportation-related goals and policies that serve as the basis for the Circulation Element. Refer to Subsection 3.2 of *Technical Appendix L1* for a summary of the General Plan Circulation Element for the City of San Bernardino and to Table 4.8-3 for the Project consistency with the Circulation Element.

### **4.8.4 TRANSPORTATION IMPACT ANALYSIS METHODOLOGY**

The Project’s VMT analysis, as provided in *Technical Appendix L2* and summarized in this Subsection, relies on the analysis methodologies described below.



**A. Vehicle Miles Traveled (VMT) Evaluation Criteria and Methodology**

**1. VMT Screening Criteria**

In August 2020, the City of San Bernardino adopted the *City of San Bernardino Traffic Impact Analysis Guidelines*, which describes specific “screening thresholds” that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed project level VMT analysis. Table 4.8-1, *City of San Bernardino Screening Criteria for Projects Exempt from VMT Analyses*, presents the City’s screening criteria that identify projects for which detailed VMT analyses are not required. Consistent with City Guidelines a land use project needs only to satisfy one of the below screening thresholds to result in a less-than-significant impact. (UC, 2024g, pp. 1-2)

**Table 4.8-1 City of San Bernardino Screening Criteria for Projects Exempt from VMT Analyses**

Screening Steps	Description
1. Transit Priority (TPA) Screening	Projects located within a TPA (i.e., within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor) are presumed to have a less than significant impact on VMT.
2. Low VMT Area Screening	Projects located within a low VMT generating zone that can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area are presumed to have a less than significant impact on VMT. A low VMT area is defined as an individual traffic analysis zone (TAZ) where total daily Origin/Destination VMT per service population is lower than the City average total daily Origin/Destination VMT per service population.
3. Project Type Screening	Local-Serving Retail under 50,000 square feet, Local Essential Services, and projects generating less than 110 daily vehicle trips are presumed to have a less than significant impact on VMT.

(UC, 2024g)

**2. VMT Metrics**

The City Guidelines identify VMT per service population (i.e., population and employees) as the measure of potential impact within the City of San Bernardino. VMT per service population is an efficiency metric that allows a project’s VMT to be compared to the remainder of the City. Accordingly, pursuant to the City Guidelines, for projects that are not screened out from the project-level VMT analysis, the ratio of a project’s VMT to service population is compared to the VMT to service population ratio anticipated with buildout of the City of San Bernardino General Plan. (UC, 2024g, pp. 2-3)

**3. VMT Modeling**

The City Guidelines identifies the San Bernardino Transportation Analysis Model (SBTAM) as the appropriate tool for conducting VMT analysis for land use projects in the City of San Bernardino, as it considers interaction between different land uses based on socio-economic data, such as population, households, and employment. The SBTAM model assumes datasets consistent with the SCAG RTP/SCS. SBTAM also is consistent with the model used to develop the City’s VMT impact thresholds identified in the City Guidelines. (UC, 2024g, p. 2)



#### 4.8.5 BASIS FOR DETERMINING SIGNIFICANCE

##### A. Thresholds of Significance

Based on the results of the Initial Study, it was determined that the Project has the potential to result in a significant impact to transportation if the Project or any Project-related component would:

- a. *Conflict with an applicable 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); or*

The above-listed thresholds are derived directly from Section XVII of Appendix G to the CEQA Guidelines and address the typical, adverse effects related to transportation that could result from development projects. Refer also to the Project's Initial Study (*Technical Appendix A*) and EIR subsection 5.4.15 for a discussion of potential impacts due to transportation that were determined to be less than significant as part of the Project's scoping process.

##### B. Thresholds of Significance for Vehicle Miles Traveled (VMT)

###### 1. Screening Thresholds

The City Guidelines describe that a project may be determined to have a less-than-significant impact and may be screened out of requiring a project-level VMT analysis if it meets at least one of the City's VMT screening criteria. The City's screening criteria previously were listed in Table 4.8-1. Projects that do not meet any of the screening criteria require a project-level VMT analysis. (UC, 2024g, pp. 1-2) The Project was not found to meet eligible screening criteria. Therefore, and consistent with the City Guidelines, a Project-level VMT analysis has been prepared and is discussed below.

###### 2. VMT Metric and Significance Threshold

The City Guidelines identify VMT per service population (i.e., population and employees) as the measure of potential impact within the City of San Bernardino. VMT per service population is an efficiency metric that allows a project's VMT to be compared to the remainder of the City. Projects found to increase the average VMT per service population within the City may be deemed to have a significant impact. More specifically, the City Guidelines identifies the following impact thresholds for project level VMT analyses: (UC, 2024g, pp. 2-3)

1. The baseline project generated VMT per service population exceeds the City of San Bernardino General Plan Buildout VMT per service population; or
2. The cumulative project generated VMT per service population exceeds the City of San Bernardino General Plan Buildout VMT per service population.

A project's effect on VMT would be considered cumulatively considerable if it resulted in the following conditions (UC, 2024g, p. 3):



1. The cumulative link-level boundary VMT per service population within the City of San Bernardino increases under the plus project condition when compared to the no project condition.

As previously noted, and based on VMT data previously published by the SBCTA for each of its member agencies and the San Bernardino County region, the City of San Bernardino General Plan Buildout VMT per service population is 31.6 (UC, 2024g, p. 3).

#### 4.8.6 IMPACT ANALYSIS

***Threshold a.: Would the Project conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?***

##### ☐ **SCAG 2024-2050 RTP/SCS**

As previously noted, SCAG adopted a 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), referred to as “Connect SoCal” in April 2024. Connect SoCal seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The fundamental goals of SCAG’s Connect SoCal 2024-2050 are focused on mobility, communities, environment, and economy. 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 mobility goals included in Connect SoCal are pertinent to the proposed Project. As indicated below, implementation of the Project would not conflict with the goals and strategies of SCAG’s regional planning program that are applicable to the Project and related to mobility, including vehicular and non-vehicular circulation. As such, Project impacts would be less than significant.

- **System Preservation and Resilience.** The Project entails the development of a site that is served by an existing roadway infrastructure system. Consistent with this goal and strategy, reinvestment in existing infrastructure would occur via the Project’s frontage improvements to 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue, improving these roadways to their General Plan standards.
- **Complete Streets; Transit and Multimodal Integration.** Complete Streets are roadways designed to support the safety, comfort and mobility for all road users. Consistent with this goal and strategy, the Project’s frontage improvements to 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue will include ADA-compliant sidewalks and will maintain the Class II and Class III bike lanes. In addition, short- and long-term bicycle parking would be provided on the Project Site as required by the California Green Building Standards Code (CalGreen). There are no existing OmniTrans bus routes along roadways that abut the Project site, and as such the Project is not required to accommodate public transit facilities.
- **Transportation Systems Management (TSM); Transportation Demand Management (TDM); Technology Integration; Funding the System.** TSM strategies seek to optimize the operation of the existing transportation system and TDM strategies aim to reduce demand for roadway travel. The Project includes roadway frontage improvements along 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue, including widening and restriping of intersections to optimize the network. The future user(s) of the



Project's building is not known at this time. The future building tenant(s)/user(s) will be required by Mitigation Measure MM 4.8-1 to prepare and implement a Commute Trip Reduction Program for transportation demand management.

- **Safety.** There are no components of the Project that would be unsafe or introduce a transportation safety hazard. The Project's frontage improvements to 5th Street, 6th Street, and Sterling Avenue and access at the Project's driveways will include appropriate site distance.

☐ **City of San Bernardino General Plan Circulation Element**

The following discussion provides an analysis of the Project's consistency with applicable General Plan policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. General Plan policies that are not relevant to the proposed Project are not discussed below, such as policies that provide direction to City staff and decision makers, policies related to land uses that are not proposed as part of the Project (e.g., residential uses), and policies related to facilities (such as highways) that would not be measurably affected by the Project. As indicated in Table 4.8-3, *Project Consistency with City of San Bernardino General Plan Circulation Element Policies*, the Project would be consistent with all applicable General Plan policies addressing the circulation system. As such, no impacts would occur.

**Table 4.8-3 Project Consistency with City of San Bernardino General Plan Circulation Element Policies**

General Plan Policy	Project Consistency
Policy 6.2.1 - Maintain a peak hour level of service D or better at street intersections.	<u>Consistent.</u> Pursuant to State CEQA Guidelines Section 15064.3(a), "...a project's effect on automobile delay shall not constitute a significant environmental impact." As such, this Policy is unrelated to the Project's potential environmental effects as defined by CEQA. Notwithstanding, a Traffic Study was prepared for the Project and is included in EIR <i>Technical Appendix L1</i> . The Project's traffic study demonstrates Project consistency with General Plan Policy 6.2.1.
Policy 6.2.3 – Keep traffic in balance with roadway capacity by requiring traffic studies to identify local roadway and intersection improvements necessary to mitigate the traffic impacts of new developments and land use changes.	<u>Consistent.</u> Traffic congestion is not an environmental impact under CEQA; however, a Traffic Study, presented in EIR <i>Technical Appendix L1</i> , was prepared for the Project that complies with the requirement of General Plan Policy 6.2.3. Thus, the Project would be consistent with General Plan Policy 6.2.3.
Policy 6.2.5 – Design roadways, monitor traffic flow, and employ traffic control measures (e.g. signalization, access control, exclusive right and left turn-turn lanes, lane striping, and signage) to ensure City streets and roads continue to function safely within our Level of Service standards.	<u>Consistent.</u> Traffic congestion is not an environmental impact under CEQA; however, a Traffic Study, presented in EIR <i>Technical Appendix L1</i> , was prepared for the Project that complies with the requirement of General Plan Policy 6.2.5. Thus, the Project would be consistent with General Plan Policy 6.2.5.
Policy 6.2.7 – Install new signals as warranted.	<u>Consistent.</u> Based on the results of the Project's TA ( <i>Technical Appendix L1</i> ), none of the Project's Study Area



**Table 4.8-3 Project Consistency with City of San Bernardino General Plan Circulation Element Policies**

General Plan Policy	Project Consistency
	intersections warrant the installation of traffic signals.
Policy 6.3.3 – Require that all City streets be constructed in accordance with the Circulation Plan (Figure C-2) and the standards established by the Development Services Director.	<u>Consistent.</u> All roadway improvements that would be constructed as part of the Project would be in full conformance with the General Plan Circulation Plan and the standards established by the Development Services Director.
Policy 6.3.4 – Require appropriate right-of-way dedications of all new ( <i>sic</i> )	<u>Consistent.</u> The Project's Application materials identify proposed ROW dedications that would occur along the Project Site's frontages with Sterling Avenue, 5 <sup>th</sup> Street, and 6 <sup>th</sup> Street. All proposed ROW dedications would be in full conformance with the General Plan Circulation Element classifications for these roadways.
Policy 6.3.5 – Limit direct access from adjacent private properties to arterials to maintain an efficient and desirable quality of traffic flow. (LU-1)	<u>Consistent.</u> All truck traffic associated with the Project would be routed to 5 <sup>th</sup> Street or 6 <sup>th</sup> Street, both of which are classified by the General Plan Circulation Element as Collector roadways. Although the Project does include two driveway access points along Sterling Avenue, which is classified by the Circulation Element as a Major Arterial, these driveways would be restricted to passenger vehicle traffic only, and the Project's TA demonstrates that efficient and desirable traffic flow would be maintained along Sterling Avenue with implementation of the Project.
Policy 6.3.6 – Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets and alleys.	<u>Consistent.</u> All Project-related traffic would be routed to 5 <sup>th</sup> Street, 6 <sup>th</sup> Street, and Sterling Avenue, and Project-related traffic is not anticipated to measurably contribute to traffic volumes along local residential streets and alleys.
Policy 6.3.7 – Require that adequate access be provided to all developments in the City including secondary access to facilitate emergency access and egress.	<u>Consistent.</u> The Project Site is not identified as a designated emergency access route. During the course of the City of San Bernardino and San Bernardino County Fire Department's required review of the Project's applications, the Project's design was reviewed to ensure that adequate access to and from the site is provided for emergency vehicles during both construction and long-term operation. As part of the Project's application review process, and during subsequent review and approval processes for building permits, the City of San Bernardino and County of San Bernardino Fire Departments are responsible for reviewing the Project's application materials to ensure that appropriate emergency ingress and egress would be available to-and-from the Project Site and that the Project would not substantially impede emergency response times in the local area.
Policy 6.4.4 – Design developments within designated and eligible scenic highway corridors to balance the objectives	<u>Consistent.</u> Based on the findings of the Project's Initial Study ( <i>Technical Appendix A</i> ), which also is summarized in



**Table 4.8-3 Project Consistency with City of San Bernardino General Plan Circulation Element Policies**

General Plan Policy	Project Consistency
<p>of maintaining scenic resources with accommodating compatible land uses. (LU-1)</p> <p>Policy 6.4.6 – Impose conditions on development within scenic highway corridors requiring dedication of scenic easements consistent with the Scenic Highways Plan, when it is necessary to preserve unique or special visual features. (LU-1)</p> <p>Policy 6.4.7 – Utilize contour grading and slope rounding to gradually transition graded road slopes into a natural configuration consistent with the topography of the areas within scenic highway corridors. (LU-1)</p>	<p>EIR subsection 5.4.1, there are no designated or eligible State scenic highways within the Project Site’s immediate vicinity (Caltrans, 2021). Accordingly, the Project has no potential to conflict with these policies.</p>
<p>Policy 6.4.8 – Develop appropriate protection measures along routes frequently used by trucks to minimize noise impacts to sensitive land uses including but not limited to residences, hospitals, schools, parks, daycare facilities, libraries, and similar uses. (LU-1)</p>	<p><u>Consistent.</u> As indicated in the analyses presented in EIR Subsection 4.7, the Project’s transportation-related noise impacts to sensitive receptors along Study Area road segments were determined to be less than significant, requiring no mitigation.</p>
<p>Policy 6.5.4 – Require that on-site loading areas minimize interference of truck loading activities with efficient traffic circulation on adjacent roadways.</p>	<p><u>Consistent.</u> The Project is designed to contain three driveways for truck access and an adequate number of dock doors to service the building. Driveway connections serving the building would include two driveways along 5<sup>th</sup> Street (one only for trucks and one for both passenger cars and trucks), one driveway along 6<sup>th</sup> Street (for both passenger cars and trucks), and two driveways along Sterling Avenue (for passenger cars only). Trucks would enter the truck court through a security gate and would have access to a truck staging parking area. The Project’s TA (<i>Technical Appendix LI</i>) demonstrates that with Project improvements and with implementation of the Project’s proposed warehouse building, acceptable traffic flow would be maintained along 5<sup>th</sup> Street and 6<sup>th</sup> Street, including at the driveways that would serve truck traffic.</p>
<p>Policy 6.6.3 – In cooperation with OmniTrans, require new development to provide transit facilities, such as bus shelters and turnouts, as necessary and warranted by the scale of the development. (LU-1)</p>	<p><u>Consistent.</u> There are no existing OmniTrans bus routes along roadways that abut the Project site, and as such the Project is not required to accommodate public transit facilities, such as bus shelters and turnouts.</p>
<p>Policy 6.6.7 – Encourage measures that will reduce the number of vehicle miles traveled during peak periods, including the following examples of these types of measures:</p> <ul style="list-style-type: none"><li>• Incentives for car-pooling and vanpooling.</li><li>• Preferential parking for car-pools and vanpools.</li><li>• An adequate, safe, and interconnected system of</li></ul>	<p><u>Consistent.</u> As mentioned in Subsection 4.8.10, below, measures available to reduce VMT include developing pedestrian network improvements, removing physical barriers to pedestrian circulation, and providing design features that encourage people to walk or bike instead of drive. As discussed in this Subsection and in EIR Section 3.0, <i>Project Description</i>, various design features are included in the Project to encourage pedestrian and bicycle</p>



**Table 4.8-3 Project Consistency with City of San Bernardino General Plan Circulation Element Policies**

General Plan Policy	Project Consistency
pedestrian and bicycle paths. <ul style="list-style-type: none"><li>Conveniently located bus stops with shelters that are connected to pedestrian/bicycle paths.</li></ul>	activity (sidewalks, bike lanes and bicycle parking), implementation of which would serve to reduce the Project's VMT.
Policy 6.9.1 – Ensure that developments provide an adequate supply of parking to meet its needs either on-site or within close proximity. (LU-1)	<u>Consistent.</u> The Project's application materials identify required parking pursuant to the standards established by the City's Municipal Code, and demonstrate that the Project would provide the minimum number of required parking spaces.
Policy 6.9.5 – Require that new developments submit a parking demand analysis to the City Engineer for review and approval whenever a proposal is made to provide less than the full code requirement of parking. (LU-1)	<u>Consistent.</u> The Project's application materials identify required parking pursuant to the standards established by the City's Municipal Code, and demonstrate that the Project would provide the minimum number of required parking spaces. The Project Applicant is not seeking any deviations to the minimum number of required parking spaces on site.

***Threshold b.: Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

As previously discussed, SB 743, approved in 2013, was intended to change the way transportation impacts are determined according to CEQA. Updates to the State CEQA Guidelines that were approved in December 2018 included the addition of CEQA Guidelines Section 15064.3, of which Subdivision b establishes criteria for evaluating a project's transportation impacts based on project type and using automobile VMT as the metric. As a component of OPR's revisions to the CEQA Guidelines, lead agencies were required to adopt VMT thresholds of significance by July 1, 2020. The City of San Bernardino adopted its *City of San Bernardino Traffic Impact Analysis Guidelines* in August 2020 (herein, "City's Guidelines"), which is used in this analysis to determine the significance of Project-related VMT.

**A. Screening Criteria**

The City Guidelines indicate that a project may be determined to have a non-significant transportation impact if it meets one or more VMT screening criteria. The Project was not found to meet eligible screening criteria. Therefore, and consistent with the City Guidelines, a Project-level VMT analysis has been prepared and is discussed below.

**B. Project-Level VMT Analysis**

**1. Project Land Use Conversion**

To evaluate Project-generated VMT, standard land use information such as building size must be converted into a SBTAM compatible dataset. The SBTAM model utilizes socio-economic data (SED) (e.g., employees) for the purposes of vehicle trip estimation. As previously indicated in EIR subsection 3.6.2, implementation of



the proposed Project is anticipated to generate approximately 466 employees, based on the employment generation rates identified in SCAG's Employment Density Study. (UC, 2024g, p. 3)

## 2. *Project VMT Calculation and Comparison to Impact Threshold*

Pursuant to the City's Guidelines, a project would result in a significant project-generated VMT impact if either of the following conditions:

1. The baseline project-generated VMT per service population exceeds the City of San Bernardino General Plan Buildout VMT per service population, or
2. The cumulative project-generated VMT per service population exceeds the City of San Bernardino General Plan Buildout VMT per service population.

The City's Guidelines also indicate that a project's effect on VMT would be considered significant if it resulted in either of the following conditions:

1. The cumulative link-level boundary VMT per service population within the City of San Bernardino<sup>1</sup> increases under the plus project condition compared to the no project condition).

Pursuant to the City's Guidelines, if the results of the VMT analysis determine that a project would meet any of the above conditions, the Project's impacts due to VMT would be considered a significant environmental impact. In addition, it should be noted that a project does not need to meet all of the above-listed conditions in order to result in a significant impact. For example, a project could meet one of the conditions listed above, while not meeting any of the other conditions, in which case the project's impacts due to VMT would be significant and would require mitigation.

### *Origin/Destination Method*

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the Study Area (i.e., Traffic Analysis Zones [TAZ] or group of TAZ's). The OD method accounts for all trips (i.e., both passenger car and truck) and trip purposes (i.e., total VMT) and therefore provides a more complete estimate of VMT. Total VMT is then divided by the Project's service population to derive the efficiency metric VMT per service population, which is then compared to the remainder of the City for purposes of identifying a potential impact. (UC, 2024g, p. 3)

Table 4.8-4, *Project Generated VMT Per Service Population*, summarizes the Project's total OD VMT per service population under baseline (2023) and cumulative (2040) conditions. As shown in Table 4.8-4, the Project's OD VMT per service population values would exceed the City's adopted threshold for baseline

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<sup>1</sup> As stated by the City Guidelines, "Please note, that for most projects establishing a boundary of the City limits should be sufficient. However, for larger projects or projects located near the City limit, a larger boundary should be applied to ensure that the true project effect is not truncated. Typically, doubling the average trip length to/from the site could establish an appropriate boundary if the City limit is not appropriate."



(2023) conditions and for cumulative (2040) conditions. Therefore, based on the City's Guidelines, the Project would have a significant direct impact due to VMTs. (UC, 2024g, p. 3)

**Table 4.8-4 Project Generated VMT Per Service Population**

	Baseline	Cumulative
Service Population <sup>1</sup>	466	466
Total OD VMT	28,097	35,405
OD VMT per Service Population	60.3	76.0
City Threshold	31.6	31.6
<b>Potentially Significant?</b>	<b>Yes</b>	<b>Yes</b>

<sup>1</sup> For the purposes of analysis, service population refers to Project employees.  
(UC, 2024g, Table 3)

### ***Boundary VMT Method***

The City Guidelines state that the VMT analyses also should contain an evaluation of a project's effect on VMT for projects not consistent with the RTP/SCS. Although the Project is consistent with the RTP/SCS, for purposes of fully disclosing any potential VMT impacts, the cumulative effect on VMT was also evaluated by using the boundary method of calculating VMT. (UC, 2024g, p. 4)

The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary or a regional area if the project is located at the City's edge). In this case, the Project's location is in the edge of the City of San Bernardino and the suitable boundary would be a 10-mile radius of the Project's location so that Project trips are not truncated nor omitted by the City boundary. (UC, 2024g, p. 4)

The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. (UC, 2024g, p. 4)

Table 4.8-5, *Cumulative Boundary VMT Results*, summarizes the VMT per service population within the City of San Bernardino with and without the Project and using the boundary method. As shown in Table 4.8-5, the cumulative link-level VMT per service population within the City of San Bernardino does not increase under the plus Project condition. Thus, when evaluating the Project's potential impacts due to VMT using the Boundary VMT Method alone, the Project's effect on VMT would be considered less than significant. Notwithstanding, and as noted above, because the Project's OD VMT per service population values would exceed the City's adopted threshold for baseline (2023) conditions and for cumulative (2040) conditions, the Project's impacts due to VMT would be significant, irrespective of fact that Project impacts due to VMT would be less than significant when using the Cumulative Boundary VMT Method alone.



**Table 4.8-5 Cumulative Boundary VMT Results**

Scenario	10-Mile Boundary	
	No Project	With Project
Service Population	991,840	992,306
Boundary VMT	15,491,310	15,487,934
VMT per Service Population	15.6	15.6
Change in VMT per Service Population	0.0	
<b>Potentially Significant?</b>	<b>No</b>	

(UC, 2024g, Table 4)

#### 4.8.7 CUMULATIVE IMPACTS

The analysis under Threshold a. discloses the Project's potential to conflict with General Plan objectives and policies related to the transportation network, including LOS standards, on a cumulative basis. As disclosed under the analysis of Threshold a., with implementation of the Project's conditions of approval, the Project would be fully consistent with all applicable programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As such, no Project impacts due to a conflict with applicable programs, plans, ordinances, and policies would occur.

The analysis under Threshold b. discloses the Project's significant direct VMT impact. Although the Project's VMT impacts were determined to be less than significant based on the Boundary VMT method, the Project would exceed the City's threshold of significance for VMT based on the OD method. As other cumulative developments within the region also have the potential to result in significant impacts due to VMT, the Project's impacts due to VMT would be cumulatively considerable prior to mitigation.

#### 4.8.8 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: No Impact. With implementation of transportation improvements and fair-share contributions towards improvements required by the City as conditions of Project approval, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including General Plan Circulation Element Policies and Connect SoCal, and no impacts would occur.

Threshold b: Significant Direct and Cumulatively-Considerable Impact. Although the analysis of the Project's potential impacts to VMT based on the Boundary VMT method were determined to be less than significant, Table 4.8-4 shows that the Project would exceed the City's significance thresholds based on the OD Method under both baseline and cumulative conditions. Accordingly, prior to mitigation, the Project's VMT impacts would be significant on both a direct and cumulatively-considerable basis.



#### 4.8.9 MITIGATION

##### ***Applicable City Regulations and Design Requirements***

The following CRDR applies to the proposed Project and reduces the Project's VMT impacts. Although this requirement technically does not meet CEQA's definition for mitigation, it is imposed herein to ensure Project compliance with applicable City regulations and design requirements.

CRDR 4.8-1 Prior to issuance of building permits, and as required pursuant to Section 3.27 of the City's Municipal Code, the Project Applicant/Developer shall comply with the applicable requirements of City of San Bernardino Development Impact Fee (DIF) program, which requires the payment of a fee to the City of San Bernardino (less any fee credits), to fund the installation of roadway segment and intersection improvements to reduce traffic congestion.

##### ***Mitigation***

MM 4.8-1 Required Commute Trip Reduction Program: Future building lease or sales agreements shall include a requirement to implement a voluntary program to discourage single-occupancy vehicle trips for employees and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. Examples of potential Commute Trip Reduction (CTR) program features include the following:

- Designated Employee Transportation Coordinator (ETC): Identify an Employee Transportation Coordinator (ETC) as part of future site operations. The role of ETC is to provide education and point of contact for commute-related questions and commuter benefits.
- Marketing of Commuter Benefits for Employees: Provide commuter benefit materials to new hires. Additionally, provide an on-site message board (physical or digital) to educate employees of commuter benefits.
- Pre-Tax Transit Pass Benefits: Provide employees access to WageWorks (or comparable) to purchase transit passes or other approved commuter expenses pre-tax.
- End-of-Trip Facilities: Provide end-of-trip facilities such as bicycle parking, lockers, etc., in order to encourage employees to use alternative modes of transportation.
- Carpool and Vanpool Ride-Matching Services: Provide information about Waze Carpool and other carpool/vanpool ride-matching services to employees.
- Guaranteed Ride Home (GRH) Program. Establish a GRH program for employees that arrive to work by carpool, vanpool, or transit and need to leave work early or are unable to use normal commute accommodations. The GRH Program can be provided via local transportation network companies.



#### 4.8.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold b: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Although the Project would be subject to compliance with Mitigation Measure MM 4.8-1, which would reduce the Project's VMT, the effectiveness of commute trip reduction measures such as those listed in Mitigation Measure MM 4.8-1 cannot be guaranteed to reduce Project VMT to a level of less than significant. No additional feasible mitigation measures are available to measurably reduce the Project's VMT. Therefore, the Project's VMT impacts are considered significant and unavoidable on both a direct and cumulatively-considerable basis.



## 4.9 TRIBAL CULTURAL RESOURCES

The analysis in this Subsection is primarily based on a report prepared by CRM TECH titled “Historical/Archaeological Resources Survey Report” (herein, “HARS”) dated December 12, 2023, and included as *Technical Appendix E* to this EIR (CRM, 2023). In addition, information in this Subsection was formed through consultation between the City of San Bernardino and Native American tribes. Much of the written and oral communication between Native American tribes and the City of San Bernardino is considered confidential in respect to places that have traditional tribal cultural significance (Gov. Code § 65352.4), and although relied upon in part to inform the preparation of this EIR Subsection, those communications are treated as confidential and are not available for public review. Under existing law, environmental documents must not include information about the location of archeological sites or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records Act (Cal. Code Regs. § 15120(d)).

This Subsection focuses on the Project’s potential to adversely affect the thresholds of significance under Section XVIII (Tribal Cultural Resources) of Appendix G to the CEQA Guidelines:

- a. *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: (1) 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 (2) 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 Resource Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe.*

### 4.9.1 EXISTING CONDITIONS

Refer to EIR Subsection 4.3.1 for a description of the cultural setting, existing site conditions, and the archaeological and historical resources assessment.

### 4.9.2 REGULATORY SETTING

The following is a brief description of the State environmental laws and related regulations addressing Tribal Cultural Resources (TCRs). Refer also to EIR Subsection 4.3.2 for a description of federal, state, and local environmental laws and regulations governing the protection of cultural resources.

#### A. Traditional Tribal Cultural Places Act (Senate Bill 18, “SB 18”)

Senate Bill 18 (SB 18) requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places (“cultural places”) through local land use planning. SB 18 also requires the Governor’s Office of Planning and Research (OPR) to include in the General



Plan Guidelines advice to local governments for how to conduct these consultations. (OPR, 2005) SB 18 is not applicable to the proposed Project because the Project does not involve a policy land use decision.

***B. Assembly Bill 52 (AB 52)***

California Assembly Bill 52 (AB 52) (2014) Chapter 532 amended Section 5097.94 of, and added Sections 21073, 21074, 21080.3.1, 21080.3.2, 21802.3, 21083.09, 21084.2 and 21084.3 to the California Public Resources Code, relating to tribal consultation. AB 52 was approved on September 25, 2014. By including TCRs early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2017a)

The Public Resources Code now establishes 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.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.) (OPR, 2017a)

If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Public Resources Code § 21084.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to TCRs. These rules apply to projects that have a notice of preparation for an environmental impact report or negative declaration or mitigated negative declaration filed on or after July 1, 2015. (OPR, 2017a)

Public Resources Code § 21074 defines “tribal cultural resources.” In brief, in order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. (OPR, 2017a)

In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources. In applying those criteria, a lead agency must consider the value of the resource to the tribe. (OPR, 2017a)



**C. Assembly Bill 2641 (AB 2641)**

Assembly Bill 2641 (AB 2641) amended California Public Resources Code 5097.98 to require that should Native American human remains be found, the identified descendants are required to make recommendations or preferences for treatment within 48 hours of being provided access to the site, rather than within 24 hours of notification by the Commission. The bill also requires the landowner, upon discovery of human remains, to ensure that the immediate vicinity, as described, is not damaged or disturbed, until specific conditions are met, including discussing and conferring with the descendants regarding their preferences for treatment. It also requires that when the commission is unable to identify descendants, the descendants fail to make a recommendation, or other specified circumstances occur, and the landowner is required to reinter the human remains, and the landowner is required to protect the site where the remains are reinterred from further and future disturbance. (CA Legislative Info, 2006)

**D. State Health and Safety Code Section 7050.5**

California Health and Safety Code (HSC) § 7050.5(b) requires that excavation and disturbance activities must cease “In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery...” until the coroner can determine regarding the circumstances, manner, and cause of any death. The coroner is then required to make recommendations concerning the treatment and disposition of the human remains. Further, this section of the code makes it a misdemeanor to intentionally disturb, mutilate or remove interred human remains. § 7051 specifies that the removal of human remains from “internment or a place of storage while awaiting internment” with the intent to sell them or to dissect them with “malice or wantonness” is a public offense punishable by imprisonment in a state prison. (CA Legislative Info, n.d.)

**4.9.3 BASIS FOR DETERMINING SIGNIFICANCE**

Based on the results of the Initial Study, it was determined that the Project has the potential to result in a significant impact to TCRs if the Project or any Project-related component would:

- a. *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: (1) 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 (2) 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 Resource Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe.*

The above-listed threshold is derived directly from Section XVIII of Appendix G to the CEQA Guidelines and addresses the typical, adverse effects related to TCRs that could result from development projects.



#### 4.9.4 IMPACT ANALYSIS

***Threshold a: 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:***

- 1. 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***
- 2. 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?***

As discussed in Subsection 4.3.4, no known resources are located on the Project Site that are 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).

In accordance with AB 52, the City of San Bernardino mailed notifications of the proposed Project to Native American tribes with traditional or cultural affiliation to the area and consulted with interested tribes regarding the Project's potential to affect a TCRs. The Gabrieleño Band of Mission Indians - Kizh Nation (Kizh Nation), requested consultation and the City engaged in consultation. During consultation, Kizh Nation did not identify any TCRs within the Project Site and indicated that there is always a remote possibility of inadvertent discoveries of cultural items on any project involving ground-disturbing activities. In light of these assertions, Kizh Nation requested that a Native American monitor from the Kizh Nation be present during Project implementation.

Yuhaaviatam of San Manuel Nation (YSMN, also known as San Manuel Band of Mission Indians) also requested consultation, and the City engaged with YSMN in consultation. YSMN did not identify any TCRs on the Project Site or in the Project area. However, they acknowledged a remote potential for discovery of subsurface resources at the Project Site during ground disturbing construction activities, and, as a result, requested to be consulted in the event of an inadvertent discovery of cultural resources.

The Project Applicant is a related entity of the YSMN, a federally recognized Indian Tribe. YSMN's ancestral territory includes the Project Site and its nearby Reservation, which was established in 1891. The Reservation is located approximately 2.9 miles northwest of the Project Site. As such, YSMN has a high degree of familiarity with the Project Site. YSMN has an approved Tribal Historic Preservation Officer approved by the federal government and recognized by California to assume the duties and responsibilities of a State Historic Preservation Officer (SHPO) on tribal lands. YSMN has agreed with the findings of a report prepared by CRM TECH titled "Historical/Archaeological Resources Survey Report" (herein, "HARS"), dated December 12, 2023, and included as *Technical Appendix E* to this EIR (CRM TECH, 2023). As stated in *Technical Appendix E*, geologic maps show the surface sediments in the Project vicinity to be primarily Holocene-age sand and



gravel associated with alluvial fans and/or active stream channels. The origins of these sediments are closely related to City Creek, which once flowed roughly 1,000 feet south of the Project location prior to channelization, and to the Santa Ana River about one mile further to the south, which was historically prone to massive flooding events before the construction of Seven Oaks Dam upstream and other flood Control projects. (CRM TECH, 2023, p. 12) Given its location along on the floodplains of these natural waterways, the Project location would not have been considered a favorable environment for long-term settlement in prehistoric times, nor would the setting be highly conducive for the preservation of subsurface archaeological deposits or TCRs. Any cultural remains encountered in this area would be of questionable contextual integrity, as their occurrence may have resulted from secondary deposition by fluvial activities on City Creek or the Santa Ana River. Furthermore, the ground surface in almost the entire Project area has been disturbed in the past by agricultural operations and, later, construction activities, which have left little vestige of the native landscape today. Consequently, the subsurface sediments in the Project area appear to be relatively low in sensitivity for potentially significant archaeological deposits of prehistoric origin (CRM TECH, 2023, p. 12).

Thus, no known TCRs have been identified on the Project Site or in the Project area that may be impacted by the Project, nor is there a likelihood of encountering significant TCRs during construction activities. Nonetheless, because ground-disturbing construction activities in native soil would have the remote potential to uncover significant TCRs, impacts would be potentially significant if the resources were not properly identified and treated. As such, and out of an abundance of caution, Mitigation Measures MM 4.3-2 through MM 4.3-5 have been identified to satisfy concerns regarding inadvertent discoveries of previously unknown subsurface TCRs. Mitigation Measures MM 4.3-2 through MM 4.3-5 will serve as the procedure that would be undertaken should the construction contractor encounter resources that warrant evaluation. Mitigation Measures MM 4.3-2 through MM 4.3-5 require the following: 1) training of construction personnel; 2) avoidance of any suspected archaeological or TCRs that may be uncovered during ground-disturbing activities; 3) consultation with a Native American monitor and a qualified archaeologist regarding any uncovered resources; 4) implementation of a testing program for any uncovered resources; 5) appropriate treatment of any discovered resources; and 6) mandatory procedures to be followed if human remains or funerary objects are found. Consistent with the conclusion reached in EIR Subsection 4.3, Project impacts to TCRs (and archaeological resources) would be less than significant with mitigation, and implementation of Mitigation Measures MM 4.3-2 through MM 4.3-5 would further ensure that potential Project impacts to TCRs are mitigated to below a level of significance.

#### **4.9.5 CUMULATIVE IMPACTS**

As indicated under the analysis of Threshold a., there are no known TCRs at the Project Site. Additionally, Project-related ground-disturbing construction activities would not involve disturbances to any native soils that have a reasonable potential to contain previously undiscovered resources. As such, it is highly unlikely that TCRs would be uncovered during Project-related construction activities. Nonetheless, the possibility exists that significant TCRs could be discovered and impacted during Project-related ground-disturbing construction activities that occur in native soil. As other cumulative developments within the region also have the potential to impact TCRs, this is considered a potential cumulatively-considerable impact for which mitigation would be required.



#### 4.9.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct and Cumulatively-Considerable Impact. No TCRs are known to be present in the Project area. Furthermore, given the Project Site's historic location along on the floodplains of natural waterways, the Project location would not have been considered a favorable environment for long-term settlement in prehistoric times, nor would the setting be conducive for the preservation of subsurface TCRs. As such, it is highly unlikely that significant TCRs would be uncovered during Project-related grading activities. Nonetheless, if Project-related ground-disturbing construction activities in native soil encounter a significant TCRs, impacts would be potentially significant if the resource is not properly identified and treated.

#### 4.9.7 MITIGATION

Mitigation Measures MM 4.3-2, MM 4.3-3, MM 4.3-4, and MM 4.3-5 apply.

#### 4.9.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant with Mitigation Incorporated. Implementation of Mitigation Measures MM 4.3-2 through MM 4.3-5 would ensure the proper identification and subsequent treatment of any significant TCRs that may be encountered during ground-disturbing activities associated with Project construction. With implementation of the required mitigation, the Project's potential impacts to TCRs (if such resources are unearthed during Project construction) would be reduced to less-than-significant levels. Cumulatively-considerable impacts would likewise be reduced to less than significant.



## 4.10 UTILITIES AND SERVICE SYSTEMS

This Subsection addresses the topics of water service and supply, wastewater collection and treatment, stormwater drainage management, and solid waste collection and disposal, and relies on publicly available information provided by local service providers. The analysis in this Subsection relies, in part, on a report, prepared by Southern California Edison (SCE) titled “Engineering Analysis Report,” dated September 14, 2023 (included as *Technical Appendix M*) (SCE, 2023). In addition, a wastewater conveyance capacity analysis was conducted and is included as *Technical Appendix O*. A complete list of references for information relied upon to prepare this Subsection can be found in EIR Section 7.0, *References*.

Based on the substantial evidence and analyses included as part of the Project’s Initial Study (EIR *Technical Appendix A*) and summarized in EIR subsection 5.4.17, the City determined that the Project would result in no impacts or less-than-significant impacts under several of the thresholds identified in Section XIX (Utilities and Service Systems) of Appendix G to the State CEQA Guidelines. Specifically, the Project’s Initial Study concluded that the Project would result in no impacts or less-than-significant impacts under the following thresholds of significance:

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;*
- c. 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;*
- d. 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;*
- e. Comply with federal, state, and local statutes and regulations related to solid waste.*

Accordingly, no additional analysis of the above-listed thresholds is required. Refer to the Project’s Initial Study (EIR *Technical Appendix A*) and the discussion provided in EIR Subsection 5.4.17 for a discussion and analysis of the above-listed thresholds not analyzed in this subsection.

This Subsection focuses on the Project’s potential to adversely affect the remaining threshold of significance under Section XIX (Utilities and Service Systems) of Appendix G to the CEQA Guidelines:

- a. 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?*



#### **4.10.1 EXISTING CONDITIONS**

##### **A. Water Service**

The Project Site is located in the San Bernardino Municipal Water Department (SBMWD) service area. The SBMWD water service area is approximately 45 square miles, serving a population of over 200,000 people in the City of San Bernardino and unincorporated areas of San Bernardino County (City of San Bernardino, 2019).

Under existing conditions, the Project Site is vacant and undeveloped, and does not generate a demand for water resources. A 36-inch water line is located beneath 6<sup>th</sup> Street and a 24-inch water line is located beneath Sterling Avenue, adjacent to the Project Site.

##### **B. Wastewater Service**

Wastewater generated by the Project would be treated at the City of San Bernardino's Water Reclamation Plant (SBWRP). According to the WRP Facilities Assessment and Master Plan, the SBWRP has a design capacity of 33 million gallons per day (MGD). In 2020, the SBWRP had a total flow of 21.5 MGD and by 2040, the flow was expected to rise to 26.4 MGD. From 1957 to July 2022, the SBWRP treated all wastewater generated by the East Valley Water District (EVWD); however, in July 2022, the EVWD opened the Sterling Natural Resource Center, which lead to a reduction in flow to the SBWRP. Factoring out EVWD contribution to influent flow, the 2040 SBWRP influent flow is expected to be 18.6 MGD, only 56.4 percent of the total daily capacity (City of San Bernardino, 2020, p. 6-4).

Under existing conditions, the Project Site is not connected to the City's sewer conveyance network. A 21-inch sewer line is located beneath 6<sup>th</sup> Street adjacent to the Project Site.

##### **C. Stormwater Conveyance Facilities**

Under existing conditions, the Project Site does not contain any stormwater drainage facilities. Surface runoff from the Project Site flows in a westerly direction and sheet flows onto Sterling Avenue.

##### **D. Solid Waste Collection and Disposal**

Solid waste from the Project Site would be collected by Burrtec Waste Industries, Inc. and is expected to be disposed of at the San Timoteo Landfill (located approximately 6.4 miles south of the Project Site) and the Mid-Valley Landfill (located approximately 10.2 miles northwest of the Project Site). According to information available from CalRecycle, in the month of March 2023, the San Timoteo landfill experienced a peak tonnage of 1,974.3 tons per day (tpd), while this facility is allowed a maximum tonnage of 3,000 tpd for up to 15 days per calendar year. In the month of April 2023, the Mid-Valley landfill had a peak tonnage of 5,498.17 tpd, while this facility is permitted to receive up to 7,500 tpd. Additionally, as of April 2019, the San Timoteo landfill had a remaining capacity of 12.3 million cubic yards, while as of June 2019 the Mid-Valley landfill had a remaining capacity of 61.2 million cubic yards. The current closure date of the San Timoteo Landfill is December 2039, and the Mid-Valley Landfill is April 2045. (CalRecycle, 2023a; CalRecycle, 2023b).



***E. Dry Utilities (Electric)***

Dry utility connection points are Site adjacent other than for Southern California Edison (SCE) electric service. The nearest connection point is the Guthrie 12kV circuit out of the Del Rosa substation, located approximately 3,400 feet (0.64 mile) north of the site along Sterling Avenue.

**4.10.2 APPLICABLE ENVIRONMENTAL REGULATIONS**

The following is a brief description of the federal, state, and local environmental laws and related regulations related to utilities and service systems.

***A. Federal Regulations***

***1. Applicable Water Supply Regulations***

☐ ***Clean Water Act***

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was substantially reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1972. Under the CWA, the Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry, and also has set water quality standards for all contaminants in surface waters. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. 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. (EPA, 2023e)

☐ ***Safe Drinking Water Act***

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. The Act authorizes EPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary (health-related) standards. The 1996 amendments to SDWA require that EPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for EPA, also encourage attainment of secondary standards (nuisance-related). Under the Act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids. (EPA, 2023f)



***B. State Regulations***

***1. Applicable Water Supply Regulations***

☐ **Water Conservation in Landscaping Act**

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. When such an ordinance had not been adopted, a finding as to why (based on the climatic, geologic, or topographical conditions) such an ordinance is not necessary, must be adopted. In the absence of such an ordinance or findings, the policies and requirements contained in the “model” ordinance drafted by the State of California shall apply within the affected jurisdiction. (CA Legislative Info, 2016b)

☐ **Water Recycling in Landscaping Act**

In 2000, Senate Bill 2095 (Water Recycling in Landscaping Act) was approved by Governor Davis requiring any local public or private entity that produces recycled water and determines that within 10 years it will provide recycled water within the boundaries of a local agency, to notify the local agency of that fact. In turn, local agencies are required to adopt and enforce within 180 days a specified recycled water ordinance, unless the local agency adopted a recycled water ordinance or other regulation requiring the use of recycled water in its jurisdiction prior to January 1, 2001. (CA Legislative Info, 2000)

☐ **Urban Water Management Planning Act**

The Urban Water Management Planning Act (UWMP Act) was proposed and adopted to ensure that water planning is conducted at the local level, as the State of California recognized that two water agencies in the same region could have very different impacts from a drought. The UWMP Act requires water agencies to develop Urban Water Management Plans (UWMPs) over a 20-year planning horizon, and further required UWMPs to be updated every five years. UWMPs are exempt from compliance with CEQA. (DWR, 2016, p. 1-2)

The UWMPs provide a framework for long term water planning and inform the public of a supplier’s plans for long-term resource planning that ensures adequate water supplies for existing and future demands. This part of the California Water Code (CWC) requires urban water suppliers to report, describe, and evaluate:

- Water deliveries and uses;
- Water supply sources;
- Efficient water uses;
- Demand management measures; and
- Water shortage contingency planning. (DWR, 2016, p. 1-3)

The UWMP Act has been modified over the years in response to the State’s water shortages, droughts, and other factors. A significant amendment was made in 2009, after the drought of 2007-2009 and as a result of the governor’s call for a statewide 20 percent reduction in urban water use by the year 2020. This was the Water Conservation Act of 2009, also known as SB X7-7. This Act required agencies to establish water use



targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020. Beginning in 2016, retail water suppliers are required to comply with the water conservation requirements in SB X7-7 in order to be eligible for State water grants or loans. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service area, which will assist the State in meeting its 20 percent reduction goal by 2020. (DWR, 2016, p. 1-2)

**☐ California Senate Bill 610**

The California Water Code (Water Code) §§ 10910 through 10915 were amended by the enactment of SB 610 in 2002. SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. (DWR, 2003; CA Legislative Info, n.d.) For the purposes of SB 610, “project” means any of the following:

- (1) A proposed residential development of more than 500 dwelling units.
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- (4) A proposed hotel or motel, or both, having more than 500 rooms.
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project. (DWR, 2003; CA Legislative Info, n.d.)

A water supply assessment (WSA) is not required because the Project proposes an industrial warehouse building with a maximum of 557,000 s.f. of total building floor area, is anticipated to employ 466 persons, and would occupy approximately 25.12 gross acres of land. rRefer to item (5) above that specifies a WSA is required for buildings housing more than 1,000 persons, occupying more than 40 acres of land, and having more than 650,000 square feet.

**☐ Executive Order B-29-15**

Executive Order (EO) B-29-15 ordered the State Water Resources Control Board (SWRCB) to impose restrictions to achieve a 25-percent reduction in potable urban water usage through February 28, 2016; directed the California Department of Water Resources (DWR) to lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes; and directed the California Energy Commission to implement a statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices. (SWRCB, 2023)



☐ **Executive Order B-37-16**

Signed on May 9, 2016, EO B-37-16 established a new water use efficiency framework for California. The order bolstered the state's drought resilience and preparedness by establishing longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans. (SWRCB, 2023)

☐ **Executive Order B-40-17**

Signed on April 7, 2017, EO B-40-17 ended the drought state of emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne, where emergency drinking water projects will continue to help address diminished groundwater supplies. It maintains water reporting requirements and prohibitions on wasteful practices. The order was built on actions taken in Executive Order B-37-16, which remains in effect. In a related action, state agencies, including the Department of Water Resources (DWR), released a plan to continue making water conservation a way of life. (SWRCB, 2023)

☐ **Sustainable Groundwater Management Act (SGMA)**

The Sustainable Groundwater Management Act (SGMA) established a new structure for managing California's groundwater resources at a local level by local agencies. SGMA required, by June 30, 2017, the formation of locally-controlled groundwater sustainability agencies (GSAs) in the State's high- and medium-priority groundwater basins and subbasins (basins). A GSA is responsible for developing and implementing a groundwater sustainability plan (GSP) to meet the sustainability goal of the basin to ensure that it is operated within its sustainable yield, without causing undesirable results. The GSP Emergency Regulations for evaluating GSPs, the implementation of GSPs, and coordination agreements were adopted by DWR and approved by the California Water Commission on May 18, 2016. (DWR, n.d.)

**2. *Applicable Solid Waste Regulations***

☐ **California Solid Waste Integrated Waste Management Act (AB 939, 1989)**

The Integrated Waste Management Act (IWMA) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board (CIWMB) and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal (it should be noted that the CIWMB no longer exists, and its duties have been assumed by CalRecycle). As part of the IWMA, the CIWMB was given a purpose to mandate the reduction of disposed waste. (CalRecycle, n.d.) The IWMA also required:

- the establishment of a task force to coordinate the development of city Source Reduction and Recycling Elements (SRREs) and a countywide siting element. (CalRecycle, n.d.)
- each city, by July 1, 1991, to prepare, adopt and submit a SRRE to the county which includes the following components: waste characterization; source reduction; recycling; composting; solid waste facility capacity; education and public information; funding; special waste (asbestos, sewage sludge, etc.); and household hazardous waste. (CalRecycle, n.d.)



- each county, by January 1, 1991, to prepare a SRRE for its unincorporated area, with the same components described above, and a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction which cannot be reduced or recycled for a 15-year period.
- each county to prepare, adopt, and submit to the Board an Integrated Waste Management Plan (IWMP), which includes all of the elements described above. (CalRecycle, n.d.)
- each city or county plan to include an implementation schedule which shows: diversion of 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 through source reduction, recycling, and composting activities; and, diversion of 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, and composting activities. (CalRecycle, n.d.)
- the CIWMB to review the implementation of each SRRE at least once every two years. (CalRecycle, n.d.)
- The IWMA required the CIWMB, in conjunction with an inspection conducted by a Lead Enforcement Agency (LEA), to conduct at least one inspection per year of each solid waste facility in the state. (CalRecycle, n.d.)

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities. (CalRecycle, n.d.)

☐ **Waste Reuse and Recycling Act (AB 1327)**

The Waste Reuse and Recycling Act (WRRRA) required the CIWMB to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. The area is required to be provided before building permits are issued. (CalRecycle, n.d.)

☐ **Mandatory Commercial Recycling Program (AB 341)**

Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011 [Chesbro, 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. AB-341 was designed to help meet California's recycling goal of 75% by the year 2020. AB 341 requires all commercial businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, n.d.)



☐ 2022 California Green Building Standards Code (CAL Green; Part 11 of Title 24, California Code of Regulations)

The most recent edition of CalGreen became effective January 1, 2023, and is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State of California (including residential structures and elementary schools). CalGreen Section 5.408.3 requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on-site until the storage site is developed. (CBC, 2023a)

3. *Applicable Energy Conservation Regulations*

☐ California Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CA. Code Regs. 6)

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. In 1975 the Department of Housing and Community Development adopted rudimentary energy conservation standards under their State Housing Law authority that were a precursor to the first generation of the Standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the Energy Commission (formally titled the State Energy Resources Conservation and Development Commission) to adopt and implement the Standards. The Energy Commission's statute created separate authority and specific direction regarding what the Standards are to address, what criteria are to be met in developing the Standards, and what implementation tools, aids, and technical assistance are to be provided. (CEC, 2018)

The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the Energy Commission to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Standards that contain data and other information that helps builders comply with the Standards. (CEC, 2018)

The 2019 update to the Building Energy Efficiency Standards focused on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential Standards included the introduction of photovoltaic into the prescriptive package, improvements for attics, walls, water heating, and lighting. The most significant efficiency improvements to the nonresidential Standards included alignment with the ASHRAE 90.1 2017 national standards. The 2019 Standards also included changes made throughout all of its sections to improve the clarity, consistency, and readability of the regulatory language. (CEC, 2018)



Public Resources Code Section 25402.1 also requires the Energy Commission to support the performance standards with compliance tools for builders and building designers. The Alternative Calculation Method (ACM) Approval Manual adopted by regulation as an appendix of the Standards establishes requirements for input, output, and calculational uniformity in the computer programs used to demonstrate compliance with the Standards. From this, the Energy Commission develops and makes publicly available free, public domain building modeling software in order to enable compliance based on modeling of building efficiency and performance. The ACM Approval Manual also includes provisions for private firms seeking to develop compliance software for approval by the Energy Commission, which further encourages flexibility and innovation. (CEC, 2018)

The 2022 version of Title 24 was adopted by the CEC and became effective on January 1, 2023. The 2022 Building Energy Efficiency Standards focuses on four key areas in newly constructed homes and businesses: (1) encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units; (2) establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies; (3) expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid; and strengthening ventilation standards to improve indoor air quality. (CEC, n.d.)

As previously stated, the Title 24 Building Energy Efficient Standards and CALGreen Code are updated on a regular basis, with the most recent approved updates consisting of the 2022 Building Energy Efficiency Standards and 2022 CALGreen Code, which became effective on January 1, 2023. Non-residential mandatory measures included in the 2022 CALGreen Code pertaining to energy efficiency include:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.



- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).

☐ **California Solar Rights and Solar Shade Control Acts**

The Solar Rights Act sets parameters for establishing solar easements, prohibits ordinances and private covenants which restrict solar systems, and requires communities to consider passive solar and natural heating and cooling opportunities in new construction. This Act is applicable to all California cities and counties. California's solar access laws appear in the state's Civil, Government, Health and Safety, and Public Resources Codes. California Pub Res Code § 25980 sets forth the Solar Shade Control Act, which encourages the use of trees and other natural shading except in cases where the shading may interfere with the use of active and passive solar systems. (EPIC, 2014; EPIC, 2010)

☐ **Alternative Fuels Plan**

On September 24, 2009, the California Air Resources Board (CARB) adopted amendments to the "Pavley" regulations that reduce greenhouse gas (GHG) emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments will cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility. The amendments will also prepare California to harmonize its rules with the federal rules for passenger vehicles. (CARB, n.d.)

The U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks, and sport utility vehicles On June 30, 2009. The first California request to implement GHG standards for passenger vehicles, known as a waiver request, was made in December 2005, and was denied by the U.S. EPA in March 2008. That decision was based on a finding that California's request to reduce GHG emissions from passenger vehicles did not meet the Clean Air Act requirement of showing that the waiver was needed to meet "compelling and extraordinary conditions." (CARB, n.d.)

The ARB's Board originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, n.d.)

The regulations had been threatened by automaker lawsuits and were stalled by the U.S. EPA's delay in reviewing and then initially denying California's waiver request. The parties involved entered a May 19, 2009 agreement to resolve these issues. With the granting of the waiver on June 30, 2009, it is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016, all while improving fuel efficiency and reducing motorists' costs. (CARB, n.d.)

The CARB has adopted a new approach to passenger vehicles – cars and light trucks – by combining the control of smog-causing pollutants and greenhouse gas emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. (CARB, n.d.)



### 4.10.3 BASIS FOR DETERMINING SIGNIFICANCE

According to Section XIX of Appendix G to the CEQA Guidelines, the proposed Project would result in a significant impact to utilities and service systems if the Project or any Project-related component would:

- a. *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.*

### 4.10.4 IMPACT ANALYSIS

***Threshold a.: 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?***

#### **A. Water and Water Treatment Facilities**

Water demand associated with the proposed Project under long-term operating conditions would consist of interior plumbing devices, outdoor landscape irrigation, and potentially various industrial process systems depending on the building's end user. Water service would be provided to the Project Site by SBMWD.

The Project would connect to the existing 24-inch water line beneath Sterling Avenue adjacent to the Site to provide potable water service to the proposed building. An irrigation line also is proposed to connect to the existing 24-inch water line within Sterling Avenue. Additionally, the Project includes proposed fire hydrants around the proposed building and along the Project Site's frontage with 6<sup>th</sup> Street that would connect to the existing 24-inch water line in Sterling Avenue and an existing 36-inch water line located beneath 6<sup>th</sup> Street. The Project would not require the relocation or upsizing of any existing off-site water lines. The installation of on- and off-site water line connections are an inherent part of the Project's construction process. Although the installation of water conveyance lines as part of the Project's construction process has the potential to cause environmental effects associated with short-term air pollutant emissions, noise, and traffic movement disruptions as a component part of the Project's overall construction, environmental impacts associated with the construction of the Project, including the installation of the proposed water lines, are evaluated throughout this EIR. Where significant impacts are identified, feasible and enforceable mitigation measures are imposed on the Project to reduce impacts to the maximum practical effect. There are no unique impacts associated with the installation of water infrastructure to serve the Project that have not already been evaluated and, where necessary, mitigated to below a level of significance under appropriate subject headings throughout this EIR. Accordingly, Project impacts specifically associated with proposed onsite and Site-adjacent water line connections would be less than significant.

While the Project would result in an incremental increase in demand for water treatment capacity, because the Project would be fully consistent with the Project Site's underlying General Plan land use designation, the Project's water demands already were accounted for as part of the 2015 San Bernardino Valley Regional Urban



Water Management Plan (WSC, 2017). Additionally, Oltmans Construction has conservatively estimated that water for dust control would require approximately 800 HCF/month (590,400 gallons) over the course of the Project. This would vary by phase with the grading being 8,000 HCF/month and maintenance being around 500 HCF/month. Water would be sourced on-site with a temp meter owned by the General Contractor. As such, the Project would not result in or require an expansion of any existing water treatment facilities, and impacts would be less than significant.

**B. Wastewater and Wastewater Treatment Facilities**

The Project's wastewater generated during both construction and long-term operation would be conveyed to the City of San Bernardino's Water Reclamation Plant (SBWRP), which has a treatment capacity of 33 million gallons of wastewater per day, but as of 2020 only treated approximately 21.5 million gallons of wastewater per day. By 2040, treated flow are expected to rise to 26.4 million gallons of wastewater per day. From 1957 to July 2022, the SBWRP treated all wastewater generated by the East Valley Water District (EVWD); however, in July 2022, the EVWD opened the Sterling Natural Resource Center, which lead to a reduction in flow to the SBWRP. Factoring out EVWD contribution to influent flow, the 2040 SBWRP influent flow is expected to be 18.6 MGD, only 56.4 percent of the total daily capacity (City of San Bernardino, 2020, p. 6-4). Thus, the SBWRP has an existing (2020) excess treatment capacity of 11.5 million gallons per day (mgd), which is expected to increase to approximately 14.4 mgd by 2040.

During construction activities associated with the Project, it is anticipated that portable toilets would be hauled to the Project site and that the portable toilets would be regularly maintained and emptied by a portable toilet service company, and that construction-related wastewater would be hauled to the SBWRP for treatment and disposal. Based on the modeling used to evaluate the Project's potential impacts to air quality and due to greenhouse gas (GHG) emissions (refer to Table 3-2 of the Project's GHG Analysis technical report, included as EIR *Technical Appendix H*), the maximum number of employees anticipated on site during construction activities would occur during the overlap of the building construction, paving, and architectural coating phases of construction. During these phases of construction, there would be up to approximately 297 employees on site. While the City of San Bernardino has not published sewer generation rates for construction activities, the Project is anticipated to generate approximately 466 employees under long-term operational conditions. As indicated below, the 466 employees associated with the Project's long-term operations would generate approximately 6,370 gpd requiring treatment. Thus, it can be assumed that the 297 employees associated with the Project's construction phase would generate less than 6,370 gpd of wastewater requiring treatment. As noted above, the SBWRP has an existing (2020) excess treatment capacity of 11.5 mgd. Thus, even when conservatively assuming the Project's construction-related employees would generate the same amount of wastewater as the Project's operational phase, the Project's worst-case generation of approximately 6,370 gpd of wastewater during construction activities would represent only 0.06% of the existing (2020) excess treatment capacity at the SBWRP. Accordingly, because the SBWRP would have sufficient capacity to treat wastewater generated during construction of the proposed Project, the Project's construction activities would not result in or require an expansion of wastewater treatment facilities at the SBWRP. Therefore, Project impacts to wastewater treatment capacity during construction activities would be less than significant.



The Project would include a proposed connection to the existing Site-adjacent 21-inch sewer line beneath 6<sup>th</sup> Street in order to provide sewer service to the proposed building. The Project would not require the relocation or upsizing of any existing sewer lines off-site, as the existing 21-inch sewer line in 6<sup>th</sup> Street and other downstream facilities have sufficient capacity to accommodate sewer flows that would be generated by the Project. Based on the Project's proposed sewer generation rates compared to the existing sewer capacity, the Project's sewer generation would consume approximately 0.069% of the total available capacity of the existing 21" VCP sanitary sewer line in the dry weather condition flow. As such, it is the opinion of the Project Engineer that this utilization of the total capacity of the existing sanitary sewer line is de minimis and would not require any related infrastructure improvements to increase capacity of said line (refer to *EIR Technical Appendix O*). The installation of on- and off-site sewer lines that connect to the 6<sup>th</sup> Street sewer line is an inherent part of the Project's construction processes, and environmental impacts associated with the Project's construction phase have been evaluated throughout this EIR. Where impacts have been identified, mitigation measures have been imposed on the Project to reduce the Project's construction-related impacts to below a level of significance. There are no impacts specifically associated with the installation of wastewater infrastructure to serve the Project that have not already been evaluated by this EIR. Accordingly, Project impacts associated with the construction of the proposed 21-inch sewer line within 6<sup>th</sup> Street would be less than significant.

With respect to wastewater treatment capacity under long-term operations, as noted above the SBWRP has an existing (2020) excess treatment capacity of 11.5 mgd, which is expected to increase to 14.4 million gallons per day by 2040. The Project would generate approximately 6,370 gpd of wastewater requiring treatment (refer to *EIR Technical Appendix O*). The Project's anticipated wastewater would represent approximately 0.06% of the existing (2020) excess treatment capacity at the SBWRP and only 0.04% of the excess treatment capacity in 2040. Accordingly, the proposed Project would not result in or require an expansion of wastewater treatment facilities; as such, physical impacts to the environment specifically associated with the Project's sewer infrastructure installation and incremental increase in demand for wastewater treatment would be less than significant.

### **C. Storm Water Drainage Facilities**

Under existing conditions, drainage from the Project Site flows in a westerly direction and sheet flows onto Sterling Avenue. Upon development of the Project, storm water generated by the Project would be captured and conveyed to on-site underground detention vaults through a network of proposed catch basins and underground piping. The proposed detention vaults would serve as both a water quality BMP as well as an underground storage facility to detain peak flow rates. During large storm events, runoff would surcharge the proposed pipe out of the underground infiltration chamber system and bubble out at the hydraulically lowest grate inlet, which is near the driveway approach on Sterling Avenue. The water that bubbles out will continue through an under sidewalk drain and discharge to the street, emulating existing conditions and overflowing to the street. (Kimley Horn, 2023a, p. 3-1)

The installation of storm water drainage infrastructure is an inherent part of the Project's construction processes. The installation of stormwater collection facilities and conveyance lines as a component part of the Project's construction process has the potential to cause environmental effects associated with short-term air pollutant emissions, noise, and traffic movement disruptions. However, physical environmental impacts



associated with the construction of the Project, including the installation of the proposed storm water drainage system, are evaluated throughout this EIR. Where significant impacts are identified, feasible and enforceable mitigation measures are imposed on the Project to reduce impacts to below a level of significance. There are no unique impacts associated with the installation of stormwater drainage infrastructure to serve the Project, and impacts would be less-than-significant.

**D. Dry Utilities (Electrical Power, Natural Gas, and Telecommunications)**

Under existing conditions, overhead electrical lines supported on wooden poles are located along the westbound side of 6<sup>th</sup> Street and along the northbound side of Sterling Avenue along the Project Site's boundary.

A capacity study was completed for the Project to determine if the current electrical system in the vicinity of the Project Site would have the capacity to support the necessary upgrades proposed with the Project, which demonstrates that the SCE would have adequate electrical capacity to serve the proposed Project (SCE, 2023).

As determined by SCE, in order to serve the Project's requested capacity of 2.0 Mega Volt Amps (MVA), a connection to the Guthrie 12kV circuit out of the Del Rosa substation would be required. This connection point, which is the closest to the Project Site, is located approximately 3,400 feet (0.64 mile) north of the Project site along Sterling Avenue. The utility trench needed to install the line would be 48-inches deep and no more than 24-inches wide. Trenching would occur within the right-of-way of Sterling Avenue, and the construction equipment is expected to include a trencher and a backhoe.

Off-site utility work is not expected to take place at one location for more than four days due to the linear nature of the construction activity. Construction impacts associated with the off-site utility work would not exceed the emissions identified in Subsection 4.1, *Air Quality*, for Project-related construction activities since the off-site construction areas would have physical constraints on the amount of daily activity that could occur. The physical constraints would limit the amount of construction equipment that could be used, and any off-site and utility infrastructure construction would not use equipment totals that would exceed the equipment totals previously presented in Table 3-2 presented in EIR Section 3.0, *Project Description*.

Because utility trenching would occur within the paved and disturbed right-of-way of Sterling Avenue, no impacts to biological or cultural resources are reasonably foreseeable. Sterling Avenue is a paved roadway and does not support any special-status plant or wildlife species, or sensitive habitat. Similarly, because of the past disturbance that occurred during the construction of the roadway, including the installation of utilities, no historic or prehistoric resources are anticipated to be encountered. Nonetheless, the mitigation measures presented in EIR Subsections 4.2, *Biological Resources*, and 4.3, *Cultural Resources*, would apply to all ground disturbing construction activities, including for the off-site utility trench.

For potential noise-related impacts, trenching activities would not generate greater noise levels than would occur with the grading/excavation phase of the Project's on-site construction activities. Construction noise from the off-site work would, therefore, be relatively short-term and the noise levels would be reduced as construction work moves linearly along the selected alignment and farther from sensitive uses. Although not



required to address a potentially significant impact, CRDR 4.7.2 would further reduce construction noise impacts from the Project construction and the off-site roadway and utility improvements. With the implementation of CRDR 4.7.2, noise from construction and off-site roadway and utility improvements would be less than significant.

The installation of other dry utilities (i.e., electrical, telecommunications, etc.) as part of the Project's construction process would occur on the Site and adjacent to the Site and as such has the potential to cause environmental effects, physical impacts to the environment associated with the Project's construction phase have been evaluated throughout this EIR. Where significant impacts have been identified for the Project's construction phase, mitigation measures have been identified to reduce such impacts to below a level of significance. There are no impacts associated with the Project's proposed dry utility connections other than for off-site electrical connections that have not already been addressed throughout this EIR. Accordingly, Project impacts due to the installation of dry utilities would be less than significant.

#### **4.10.5 CUMULATIVE IMPACT ANALYSIS**

The Project would require water, wastewater, stormwater drainage, and dry utility services and infrastructure, as well as solid waste disposal during construction and operation of the Project. Development of public utility and private utility company infrastructure is part of an extensive planning process involving utility providers and jurisdictions with ministerial and discretionary review authority. The coordination process associated with the preparation of infrastructure plans is intended to ensure that adequate public utility and private utility company services and resources are available to serve both individual development projects and cumulative growth in the region. Each individual development project is subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. For the proposed Project, utility infrastructure requiring installation to service the Project would be on-site or adjacent to the site other than a subsurface electric utility line that would need to be installed in Sterling Avenue for a distance of 0.64 mile to the north of the Project site, with construction equipment (a trencher and backhoe) being present in any one location along the off-site line for up to approximately four days.

Cumulatively-considerable impacts associated with the Project's proposed utility connections are inherent to the Project's construction phase, and the Project's construction-related impacts to the environment have been evaluated throughout this EIR under the appropriate subject headings. Where potentially significant construction-related impacts have been identified, mitigation measures have been identified to reduce the Project's potential construction-related impacts to below a level of significance. There are no impacts associated with the Project's proposed construction phase that have not been evaluated by this EIR. Therefore, because the comprehensive utility and service planning and coordination activities described above would ensure that new development projects do not disrupt or degrade the provision of utility services, and because the analysis throughout this EIR shows that with mitigation the Project's cumulatively-considerable impacts during construction would be reduced to less-than-significant levels, cumulatively considerable impacts to utilities and service systems would be less than significant.



#### 4.10.6 SIGNIFICANCE OF IMPACTS BEFORE MITIGATION

Threshold a: Significant Direct Impact. The physical environmental effects associated with installing the Project's water, wastewater, stormwater drainage, and dry utility infrastructure are evaluated throughout this EIR. The analysis in this EIR demonstrates that, with the implementation of mitigation measures, impacts associated with the Project's construction activities would be reduced to less-than-significant levels. In addition to on-site and site-adjacent construction activities, an off-site subsurface electrical line would be installed for a distance of approximately 0.64 mile to the north along Sterling Avenue. Construction activities would be present for up to approximately four days along the alignment in any particular location, temporarily contributing to potential impacts associated with air pollutant emissions and noise. Additionally, significant indirect biological resource and direct cultural resource and tribal cultural resource impacts could occur, the same as for construction activities on the Project Site.

#### 4.10.7 MITIGATION

The mitigation measures identified throughout this EIR for Project-related construction impacts (e.g., air quality, biological resources, cultural resources, and tribal cultural resources) shall apply. These mitigation measures include: MM 4.1-1, MM 4.2-1, MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4, MM 4.3-5, and MM 4.5-1 (related to trenching and backfilling).

#### 4.10.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a.: Less-than-Significant with Mitigation Incorporated. Implementation of Mitigation Measures MM 4.1-1, MM 4.2-1, MM 4.3-1, MM 4.3-2, MM 4.3-3, MM 4.3-4, MM 4.3-5, and MM 4.5-1 (related to trenching and backfilling) would ensure that construction-related impacts associated with utility line trenching and installation would be reduced to less than significant.



## 5.0 OTHER CEQA CONSIDERATIONS

### 5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED

The State CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (State CEQA Guidelines Section 15126(b)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, the proposed Project is anticipated to result in one impact to the environment that cannot be reduced to below a level of significance after the consideration of Project design features, compliance with applicable federal, State and local regulations, and the application of the feasible mitigation measures identified in this EIR. The significant impact that cannot be mitigated to a level below thresholds of significance consists of the following:

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Although the analysis of the Project's potential impacts to VMT based on the Boundary VMT method were determined to be less than significant, the Project would exceed the City's significance thresholds based on the OD Method under both baseline (2023) and cumulative (2040) conditions. Because the Project's future building tenant(s) is not known, the effectiveness of any potential commute trip reduction measure to mitigate the impact cannot be quantified at this time. Although the Project would be subject to compliance with Mitigation Measure MM 4.8-1, which would reduce the Project's VMT, the effectiveness of commute trip reduction measures such as those listed in Mitigation Measure MM 4.8-1 cannot be guaranteed to reduce Project VMT to a level of less than significant. No additional feasible mitigation measures are available to measurably reduce the Project's VMT. Therefore, the Project's VMT impacts are considered significant and unavoidable on both a direct and cumulatively-considerable basis.

### 5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROJECT SHOULD IT BE IMPLEMENTED

The State CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (State CEQA Guidelines Section 15126.2(c)). An environmental change would fall into this category if: a) the Project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the Project would generally commit future generations to similar uses; c) the Project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources are not justified (e.g., the Project results in the wasteful use of energy). As concluded by Chapter 4.0 of this EIR, the Project's only significant and unavoidable impact that cannot be mitigated to a less-than-significant level is vehicle miles traveled (VMT).

Determining whether the Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Natural resources, in the form of construction materials and



energy resources, would be used in the construction of the proposed Project, but development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels). Additionally, the Project is required by law to comply with the California Green Building Standards Code (CALGreen), compliance with which would minimize the Project's demand for energy, including energy produced from non-renewable sources. The Project also would be subject to California Energy Code, or Title 24, which contains measures to reduce natural gas and electrical demand, thus requiring less non-renewable energy resources. Although the Project would entail the long-term, on-going use of natural resources (i.e., water, electricity, and fossil fuels), the analysis in EIR Subsection 4.4, *Energy*, demonstrates that the Project would avoid the inefficient, wasteful, and unnecessary consumption of energy during Project construction, operation, maintenance, and/or removal, and that the Project's demands for water, electricity, natural gas, and fossil fuels would not directly or cumulatively affect the availability of these resources. With mandatory compliance to the energy efficiency regulations and mitigation measures, the Project would not involve the use of large sums or sources of non-renewable energy.

Implementation of the Project would commit the Project Site to one large light industrial warehouse building. The potential high-cube fulfillment center land use for the Project is compatible with the existing and planned industrial and airport-related land uses that are located north, south, and west of the Project Site. The analysis presented throughout this EIR demonstrates that the Project would not result in any significant and unavoidable local/localized physical impacts to the receptors within the surrounding area and is in compliance with the City of San Bernardino General Plan. Although the Project would result in unavoidable physical impacts to transportation (i.e., due to Vehicle Miles Traveled [VMT]), this unavoidable impact is significant due to its effect on the region, not their local impacts to receptors located near the Project Site. Accordingly, the Project and its environmental effects would not compel or commit surrounding properties to land uses other than those that are existing today or those that are planned by the City of San Bernardino General Plan or the City of Highland General Plan. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties.

Subsection IX, *Hazards and Hazardous Materials*, of the Project's Initial Study (EIR *Technical Appendix A*; also summarized herein in subsection 5.4.7) provides an analysis of the potential for hazardous materials to be transported to/from the Project Site and/or used on the Project Site during construction and operation. As concluded in the Initial Study and in subsection 5.4.7, mandatory compliance with federal, state, and local regulations related to hazardous materials handling, storage, and use by all Project construction contractors (near term) and occupants (long-term) would ensure that any hazardous materials used on-site would be safely and appropriately handled to preclude any irreversible damage to the environment that could result if hazardous materials were released from the site.

### **5.3 GROWTH-INDUCING IMPACTS OF THE PROJECT**

CEQA requires a discussion of the ways in which the proposed Project could be growth inducing. The State CEQA Guidelines identify a project as growth inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment (State CEQA Guidelines Section 15126.2(e)). New employees and new residential populations represent direct forms



of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with an increase in population or employment and thus reducing or removing the barriers to growth. This typically occurs in suburban or rural environs where population growth results in increased demand for service and commodity markets responding to the new population of residents or employees. According to regional population projections included in SCAG's *Connect SoCal*, the City of San Bernardino's population is projected to grow by 14,200 residents between 2016 and 2045 (approximately 0.2% annual growth). Over this same time period, employment in the City is expected to add 24,300 new jobs (approximately 0.7% annual job growth) (SCAG, 2020b, Demographics and Growth Forecast Appendix, Table 14). Economic growth would likely take place as a result of the proposed Project's operation as a light industrial development, although the Project's anticipated employment would be within the range of projections identified by *Connect SoCal* for the City of San Bernardino. The Project would create approximately 540 jobs, a majority of which would likely be filled by residents of the housing units either already built or planned for development within the City of San Bernardino and nearby cities and unincorporated areas. The Project's construction- and operational-related employees would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services needs would be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment. Therefore, while the Project would create economic opportunities by introducing new job opportunities to the Project site, this change would not induce substantial new growth in the region.

Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population in excess of what is assumed in applicable master plans, land use plans, or in projections made by regional planning agencies such as SCAG. Significant growth impacts also could occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

The area surrounding the Project Site consists of a mixture of undeveloped land, industrial uses, commercial uses, airport-related businesses and operations, and residential uses. Development of the Project Site with a proposed 557,000 s.f. warehouse building is not expected to place short-term development pressure on abutting properties because the undeveloped properties in the immediate Project vicinity already are designated by the City of San Bernardino General Plan for future development with commercial and industrial uses. Furthermore, roadway and utility improvements proposed as part of the Project have been designed to serve the proposed Project and would not remove infrastructure-related obstacles to development of other off-site properties. Additionally, with improvements, fee payments, and fair-share monetary contributions, as would be imposed as conditions of approval for the Project based on the results of the site-specific Traffic Analysis (EIR



*Technical Appendix LI*), all roadways that would serve the Project would have the capacity to accommodate Project and cumulative traffic, and the Project does not include any major transportation-related improvements that could remove an impediment to growth in the local area. Based on the analysis provided in EIR Subsection 4.10, *Utilities and Service Systems*, the Project would be adequately served by water service, sewer service, drainage facilities, and other utilities and service systems. Accordingly, the growth-inducing impacts of the Project would be less than significant. The Project is not expected to induce growth of land use changes on other parcels in the vicinity, as other lands surrounding the site are either already developed or planned to be developed consistent with their general plan land use designations.

Furthermore, the proposed Project's improvements to the public infrastructure, including roads, drainage infrastructure, and other utility improvements are consistent with City of San Bernardino's General Plan and would not indirectly induce substantial and unplanned population growth in the local area.

Based on the foregoing analysis, the Project would not result in substantial, adverse growth-inducing impacts.

## 5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT DURING THE EIR PREPARATION PROCESS

CEQA Guidelines Section 15128 requires that an EIR "...contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." As part of the Project's Initial Study (EIR *Technical Appendix A*), it was determined that implementation of the Project clearly would have no potential to result in significant impacts under 10 environmental issue areas: Aesthetics; Agriculture and Forestry Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Population and Housing; Public Services; Recreation; and Wildfire. Additionally, it was determined as part of the Project's Initial Study that the Project clearly would have no impact or a less-than-significant impact under certain thresholds of significance under the issue areas of Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Noise; Transportation; and Utilities and Service Systems. Therefore, these issue areas and thresholds of significance were not required to be analyzed in detail in EIR Section 4.0, *Environmental Analysis*. A brief analysis of the Project's impacts to these issue areas is presented below.

### 5.4.1 AESTHETICS

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

The Project Site is located in the City of San Bernardino. The property is not designated as a scenic vista by the City of San Bernardino General Plan or any other relevant planning document. With respect to visual resources and scenic vistas, the General Plan indicates that the following areas could potentially benefit from sensitive treatment of land: Kendall Hills, San Bernardino Mountains, the hillsides adjacent to Arrowhead Springs, Lytle Creek Wash, East Twin Creeks Wash, the Santa Ana River, Badger Canyon, Bailey Canyon, and Waterman Canyon. (City of San Bernardino, 2005a, p. 12-22). The Project Site is located in the southeastern portion of the City and is not associated with any of these features. The San Bernardino Mountains, located north of the Project Site, is the only one of these features that is visible from the Project Site. Due to the orientation of the San Bernardino Mountains in relation to the Project Site (the mountains are



located north of the Project Site and north of 6<sup>th</sup> Street, implementation of the Project would not alter views of the Mountains from 6<sup>th</sup> Street because the Project would not result in any improvements/alterations to the north side of 6<sup>th</sup> Street. The Project could partially obscure views of the San Bernardino Mountains from 5<sup>th</sup> Street, located south of the Project Site. The proposed Project's building would have a maximum height of 60.0 feet and other vertical features (walls, fences, landscaping, etc.) would be shorter and have substantially less mass than the building. Views of the San Bernardino Mountains would continue to be available above the building. Because public views of the San Bernardino Mountains would still be available from public viewing areas surrounding the Project Site and development on the site would be low in stature compared to the approximate 10,000-foot peak height of the mountain range, the Project would not have a substantial adverse effect on the mountain view and would have a less than significant impact on the San Bernardino Mountains scenic vista. Impacts would be less than significant.

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

No impact would occur because there are no designated or eligible State scenic highways within the Project Site's immediate vicinity (Caltrans, 2021). The nearest designated State scenic highway is a segment of State Route 243 (SR 243), located approximately 24.1 miles southeast of the Project Site. The nearest eligible (but not yet designated) State scenic highways include a segment of State Route 330 (SR 330), located approximately 3.2 miles northeast of the Project Site, and a segment of State Route (SR) 38 located approximately 4.5 miles northeast of the Project Site. Due to the distance of these highways to the Project Site and the presence of intervening development and topography, the Project Site does not offer views of scenic resources from these road segments. Thus, implementation of the Project as proposed would not adversely affect views of scenic resources from any State-designated scenic highway. No impact would occur.

***Threshold c: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views 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?***

The United States Census Bureau defines "urbanized area" as a densely settled core of census tracts and/or census blocks that have 50,000 or more residents and meet minimum population density requirements while also being adjacent to territory containing non-residential urban land uses. The Project Site is located within the boundaries of the Census-defined Riverside-San Bernardino urban area (USCB, 2012); therefore, the Project would be considered to result in a significant adverse impact under this threshold only if the Project design would conflict with applicable zoning and other regulations governing scenic quality.

Specifically, regulations governing scenic quality are established through the City's Municipal Code and General Plan. The Project would be developed in compliance with applicable provisions of the City's Municipal Code, including established development standards as stipulated in Chapter 19.08. The property is designated by the General Plan as Industrial (I) and zoned Industrial Light (IL). The Project is consistent with the land use designation and zoning of the property, which is intended to retain, enhance, and intensify existing



development and provide for the new development of lighter industrial uses along major vehicular, rail, and air transportation routes serving the City (City of San Bernardino, 2023, p. 1577). The City has established development standards in the Municipal Code to protect the visual and scenic quality of the City. The Project would not conflict with applicable development standards in the City's Municipal Code established for the Industrial Light zone. Thus, no impact would occur.

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

The Project would introduce new sources of artificial light to the property, including parking lot lighting and building lighting. All new light sources associated with the Project would be required to comply with the City's Municipal Code standards for exterior lighting, which prevent light spillover, glare, nuisance, inconvenience, or hazardous interference of any kind on adjacent properties and streets. In particular, the City of San Bernardino Municipal Code Section G19.08.050 would apply to the Project, which requires that all lighting be shielded to confine light spread within the site boundaries (City of San Bernardino, 2023, p. 1599). Furthermore, areas surrounding the Project Site to the north and east are developed with or planned for the development with urban uses, and Project-related lighting would be complementary to the lighting associated with these existing uses. A photometric plan has been prepared by Gregg Electric as part of the Project's Development Plan application materials to demonstrate compliance with City Municipal Code lighting standards (EIR *Technical Appendix N*). There are no components of the Project-related lighting that could significantly and adversely affect day or nighttime views in the area. Thus, Project-related lighting impacts would be less than significant.

With respect to glare, a majority of the Project's building elements would consist of tilt-up concrete panels with no potential for glare, although the corners of the building would include glass elements. While window glazing has a potential to result in minor glare effects, such effects would not adversely affect daytime views of surrounding properties, including motorists along adjacent roadways, because the glass proposed is low-reflective. Furthermore, the Project would include landscaping and/or screen walls around the perimeter of the Project Site which would provide screening that would limit visibility of the proposed building from surrounding streets. Thus, glare impacts from proposed building elements would be less than significant. Solar photovoltaic panels located on the building roof are required by regulation to be found consistent with aviation activities at the San Bernardino International Airport as part of the building permit approval process; mandatory adherence to regulatory requirements assures that any glare producing features on the building including the roof would have less-than-significant impacts to aviation.

Based on the foregoing analysis, the Project would not create a new source of substantial light or glare and would not adversely affect daytime or nighttime views of the area. Impacts would be less than significant.



#### 5.4.2 AGRICULTURE AND FORESTRY RESOURCES

**Threshold a:** *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?*

Under existing conditions, the Project Site does not contain agricultural uses. According to the California Department of Conservation's (CDC) Farmland Mapping and Monitoring Program (FMMP), the Project Site does not contain any soils mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC, 2018). As such, the proposed Project has no potential to convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), to non-agricultural use. Accordingly, no impact would occur.

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

Under existing conditions, the Project Site does not contain agricultural zoning. As mapped by the CDC, the Project Site also is not located on land that is subject to a Williamson Act contract (CDC, 2018). Under existing conditions, the Project Site is zoned "Industrial Light (IL)." As such, the proposed Project has no potential to conflict with existing zoning for agricultural use, or a Williamson Act contract. Based on the foregoing, the Project has no potential to impact lands zoned for agricultural use or conflict with any Williamson Act contracts. No impact would occur.

**Threshold c:** *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))?*

The Project Site is not located on lands designated as forest lands or timberlands by the City's General Plan, and none of the surrounding properties are designated as forest lands or timberlands. The San Bernardino National Forest is the nearest designated forestland and is located approximately 3.0 miles north of the Project Site with substantial intervening development (USFS, 2021). Furthermore, the Project Site is zoned "Light Industrial (IL)," and none of the surrounding properties are zoned for forestry- or timberland-related uses. Accordingly, no forests or any zoning for forest land or timberland are located on or near the Project Site. The proposed Project has no potential to 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)). No impact would occur.

**Threshold d:** *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*

As noted in the preceding response, the Project Site is not located on or near forest land. Therefore, the proposed Project would not result in the loss of any forest land or convert forest land to non-forest use. No impact would occur.



***Threshold e: 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?***

As noted in the preceding responses, the Project Site is not located on or near lands designated Farmland or forest land. There is no Farmland, forest land, or timberland near the Project Site. As such, the proposed Project has no potential to 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. Therefore, no impact would occur.

### 5.4.3 AIR QUALITY

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

Any temporary odor impacts generated by construction activities on the Project Site, such as asphalt paving and the application of architectural coatings, would be short-term and cease upon completion of the construction phase of the Project. Additionally, such odors would not affect a substantial number of people, based on the proximity and nature of land uses surrounding the Project Site (i.e., primarily undeveloped land, commercial, industrial, and residential land uses). The warehouse use proposed for the Project Site is not expected to involve activities that generate substantial or noticeable amounts of odor during long-term operation. Additionally, the Project would be subject to SCAQMD Rule 402, “Nuisance” that controls odors by prohibiting air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. For the control of odors associated with stored waste, the City of San Bernardino’s solid waste regulations (Chapter 8.24 of the City’s Municipal Code) requires solid waste to be stored within enclosed containers and prohibits the storage of solid waste in a manner that would present a public nuisance. Accordingly, mandatory compliance with regulatory requirements will ensure that any odor effects would be less than significant.

### 5.4.4 BIOLOGICAL RESOURCES

***Threshold b: 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?***

Based on a review of aerial photography and a field view, a large majority (approximately 99%) of the Project Site consists of land that is currently vacant, undeveloped, and overtaken by non-native plants and anthropogenic activities. To that end, the Project Site does not contain any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Because no such resources exist, the Project has no potential to impact these resources.



***Threshold c: Would the Project have 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?***

The Project Site is an upland, supporting no riparian or riverine habitats, and based on a review of aerial photography and a field view, there are no indicators of well-defined water conveyance bed, bank or channel. The topography suggests that the Project Site lacks waters subject to the Clean Water Act, or Fish and Game Code Section 1600 jurisdiction. Furthermore, the National Wetland Inventory has no records of special aquatic resources within the Project Site (USFWS, 2023b).

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

City of San Bernardino Municipal Code Section 19.28.100 requires the issuance of a tree removal permit prior to the removal of 5 or more mature trees. The Project Site contains 3 trees that would be removed as part of the Project. The issuance of a tree removal permit would not be required, because it only applies when more than 5 trees are removed. There are no additional local policies or ordinances protecting biological resources that are applicable to the Project or Project Site. Therefore, no impact would occur.

***Threshold f: 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 is no adopted habitat conservation plan, natural conservation community plan, or other approved local, regional, or state habitat conservation plan applicable to the City of San Bernardino or the Project Site. Accordingly, the Project would have no potential to conflict with any such plans, and no impact would occur.

#### 5.4.5 CULTURAL RESOURCES

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

There are no known cemeteries at the Project Site and no known formal cemeteries are located within the immediate site vicinity. While not expected, in the unlikely event that human remains are discovered during ground-disturbing activities required to implement the proposed Project, compliance with the applicable provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 *et. seq.* would be required. Mandatory compliance with these provisions of State law would ensure that impacts to human remains, if unearthed during construction activities, would be appropriately treated. No significant impact would occur with mandatory compliance with the Public Resources Code.



#### 5.4.6 GEOLOGY AND SOILS

***Threshold a.(i): 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, 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?***

There are no known active or potentially active faults on or trending toward the Project Site and the Project Site is not located within a mapped Alquist-Priolo Earthquake Fault Zone (SoCalGeo, 2024a, p. 9). Because there are no known faults located on or trending towards the Project Site, there is no potential for the Project to directly or indirectly expose people or structures to substantial adverse effects related to ground rupture. No impact would occur.

***Threshold a.(ii): Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?***

According to a site-specific geotechnical study prepared for the Project Site by Southern California Geotechnical and dated February 16, 2024 (EIR *Technical Appendix G1*), the Project Site is located in a seismically active area of Southern California and is expected to experience moderate-to-severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other properties throughout Southern California. As a condition of Project approval, the Project would be required to be constructed in accordance with the California Building Standards Code (CBSC, Title 24, Part 11 of the California Code of Regulations) and the City of San Bernardino Building Code (Chapter 15.04 of the City of San Bernardino Municipal Code), which incorporates the CBSC with minor exceptions and changes to ensure applicability of the requirements within the City of San Bernardino (City of San Bernardino, 2023). The CBSC and City of San Bernardino Building Code have been specifically tailored for California earthquake conditions and provide standards that must be met 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. In addition, the CBSC (Chapter 18) requires development projects to prepare geologic engineering reports to identify site-specific geologic and seismic conditions and provide site-specific recommendations including, but not limited to, recommendations related to ground stabilization, selection of appropriate foundation type and depths, and selection of appropriate structural systems, to preclude adverse effects resulting from strong seismic ground-shaking. A geotechnical study has been prepared for the Project. Adherence to the recommendations in the geotechnical study is a regulatory requirement, ensuring that impacts associated with seismic ground shaking would be less than significant (SoCalGeo, 2024a). A less than significant impact would occur with adherence to the CBSC Section 1803, City of San Bernardino Municipal Code, and the Project's geotechnical report's recommendations. The recommendations from the geotechnical report, which are included as CRDRs, are as follows:

##### CRDR 5.4.6-1 Site Preparation:

- Initial site preparation should include demolition of the remnants of the previous development including all foundations, floor slabs, utilities, septic systems, and any other subsurface improvements that will not remain in place for use with the new development. Stripping of the existing vegetation



including grass, weed growth, trash, and furniture. These materials should be disposed of off-site. Concrete and asphalt debris may be crushed to a maximum 1- inch particle size, mixed well with the on-site soils, and incorporated into structural fills if desired. Alternatively, it may be feasible to process these materials into crushed miscellaneous base.

- Remedial grading is recommended to be performed within the proposed building pad area to remove the undocumented fill soils, which extend to depths of 2 to 5½± feet at all of the boring and trench locations, in their entirety. The building pad area should also be overexcavated to a depth of at least 4 feet below existing grade and to a depth of at least 3 feet below proposed pad grade, whichever is greater. Overexcavation within the foundation areas is recommended to extend to a depth of at least 3 feet below proposed foundation bearing grade.
- Deeper removals may be necessary in the areas of Boring Nos. B-5 and B-7 due to the presence of loose and compressible/collapsible soils extending to depths of 6½ to 8± feet below the existing site grades.
- After overexcavation has been completed, the resulting subgrade soils should be evaluated by the geotechnical engineer to identify any additional soils that should be overexcavated. The resulting soils should be scarified and thoroughly watered to achieve a moisture content of 0 to 4 percent above optimum moisture, to a depth of at least 24 inches. The overexcavation subgrade soils should then be recompacted and the excavated soils replaced as structural fill, compacted to 90 percent of the ASTM D-1557 maximum dry density.
- The new parking area subgrade soils are recommended to be scarified to a depth of 12± inches, moisture conditioned or air dried and recompacted to at least 90 percent of the ASTM D-1557 maximum dry density.

CRDR 5.4.62 Building Foundations:

- Conventional shallow foundations, supported in newly placed compacted fill.
- 3,000 lbs/ft<sup>2</sup> maximum allowable soil bearing pressure.
- Minimum reinforcement consisting of at least four (4) No. 5 rebars (2 top and 2 bottom) in strip footings. Additional reinforcement may be necessary for structural considerations.

CRDR 5.4.6-3 Building Floor Slab:

- Conventional Slab-on-Grade: minimum 6 inches thick.
- Modulus of Subgrade Reaction:  $k = 150$  psi/in.
- Reinforcement is not considered necessary for geotechnical considerations.
- The actual floor slab reinforcement should be determined by the structural engineer, based on the imposed slab loading.

***Threshold a.(iv): Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?***

According to San Bernardino General Plan Figure S-7, *Slope Stability and Major Landslides*, the Project Site is not located in an area which has a known susceptibility to landslides (City of San Bernardino, 2005a, Figure S-7). Furthermore, the Project Site is relatively flat and is approximately 3.0 miles south of the nearest location



identified by the San Bernardino General Plan as containing the potential for landslide hazards (City of San Bernardino, 2005a, Figure S-7). Accordingly, the proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides.

***Threshold b: Would the Project result in substantial soil erosion or the loss of topsoil?***

Project construction activities would disturb the Project site and expose subsurface soils, which would temporarily increase erosion susceptibility. The Project would be required to adhere to standard regulatory requirements, including, but not limited to, requirements imposed by the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit and a Project-specific Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) to minimize water pollutants including sedimentation in stormwater runoff. With mandatory compliance to these regulatory requirements, included below as CRDR 5.4.6-5, impacts associated with soil erosion and/or the loss of topsoil are assured to be less than significant.

CRDR 5.4.6-5 The Project would be required to adhere to standard regulatory requirements, including, but not limited to, requirements imposed by the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit and a Project-specific Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) to minimize water pollutants including sedimentation in stormwater runoff.

***Threshold d: Would the Project 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?***

A site-specific geotechnical study (EIR *Technical Appendix G1*) has been prepared for the Project Site by Southern California Geotechnical and dated February 16, 2024. No expansive soils were identified and the Project Site does not have the potential to contain expansive soils. As such, no impact associated with expansive soils would occur.

***Threshold e: 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?***

The Project does not include the installation of any septic tanks or alternative waste water disposal systems, as the warehouse building would connect to the City of San Bernardino Municipal Water Department's sewer system. Thus, no impact would occur.

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

The Project site contains artificial fill at depths of approximately 2.0 to 5.5 feet and alluvium to depths extending to 50+ feet below ground surface. The near surface Quaternary (Pleistocene to Holocene) younger alluvial fan deposits consists of medium dense to very dense silty sands, sandy silts, and poorly- to well-graded



sands with varying amounts of fine to coarse gravel, cobbles, and boulders, extending to depths of 12 to 25± feet below existing site grades. The artificial fill and younger alluvium have a low paleontological sensitivity and no reasonable potential to yield significant paleontological resources. As such, no impact would occur.

#### 5.4.7 HAZARDS AND HAZARDOUS MATERIALS

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

During Project construction, limited amounts of hazardous materials typical of construction activities would be transported to, stored, and used on the Project Site (e.g., fuel, lubricants, architectural coatings). Also, although future building user(s) are unknown at this time, limited amounts of hazardous materials may be used and stored on the Project Site as part of routine business operations. Mandatory compliance with regulatory requirements set forth in the California Hazardous Waste Control Law, the California Code of Regulations Titles 5, 17, 22, and 26, and California Vehicle Code, Section 32000.5, *et seq.*, pertaining to the transport, use, and disposal of hazardous materials would ensure that impacts would be less than significant. There are no reasonably foreseeable circumstances associated with the Project's construction or operation that would result in a significant hazard to the public or the environment associated with standard construction and operational practices. A less than significant impact would occur.

**Threshold b:** *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?*

As indicated in the response to Threshold 5.4.5(a), above, limited amounts of hazardous materials typical of construction activities would be transported to, stored, and used on the Project Site during Project construction and limited amounts of hazardous materials may be used and stored on the Project Site as part of routine business operations. Mandatory compliance with regulatory requirements, set forth in the California Hazardous Waste Control Law, the California Code of Regulations Titles 5, 17, 22, and 26, and California Vehicle Code, Section 32000.5, *et seq.*, pertaining to the transport, use, and disposal of hazardous materials would ensure that impacts would be less than significant. There are no reasonably foreseeable circumstances associated with the Project's construction or operation that would result in a significant hazard to the public or the environment associated with standard construction and operational practices. A less than significant impact would occur.

**Threshold c:** *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?*

The Project Site is not located within one-quarter mile of an existing or proposed school (Google Earth, 2023). The nearest existing school facilities to the Project Site are Warm Springs Elementary School (approximately 0.4-mile to the north) and Indian Springs High School (approximately 0.5-mile to the northwest). The proposed warehouse operation at the Project Site would be conducted mainly inside of the enclosed building, where a variety of consumer products would likely be stored. The Project does not include any land uses that may be considered point source emitters. Accordingly, the proposed Project would not emit hazardous emissions or



handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and no impact would occur.

***Threshold d: 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?***

The California Environmental Protection Agency (CalEPA) maintains several lists of contaminated sites that are identified as meeting the “Cortese List” requirements for hazardous materials sites. A review of the CalEPA’s Cortese List Data Resources indicates that the Project site is not included on any list of hazardous materials sites compiled pursuant to Government Code 65962.5 (DTSC, n.d.). As such, no impact would occur.

***Threshold e: 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?***

The San Bernardino International Airport (SBIA) property is located 0.2-mile south of the Project Site. The Project entails the development of a warehouse building, which is not a noise-sensitive use. Also, the Project Site is not subject to incompatible aircraft noise, as it is located outside of the SBIA’s projected 65 decibel (dBA) CNEL noise contour (SBIAA, 2010, Exhibit 4H). The Federal Aviation Administration (FAA) has issued a Determination of No Hazard to Air Navigation for the Project (FAA, 2023). Therefore, there is no reasonable potential for the Project to result in significant safety hazards or noise exposure for people working or visiting on and around the Project Site.

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

The Project Site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the City of San Bernardino and the San Bernardino County Fire Department will require adequate emergency access for emergency vehicles. As part of the Project’s application review process, and during subsequent review and approval processes for building permits, the City of San Bernardino and County of San Bernardino Fire Departments are responsible for reviewing the Project’s application materials to ensure that appropriate emergency ingress and egress would be available to-and-from the Project Site and that the Project would not substantially impede emergency response times in the local area. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and no impact would occur.



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

The Project site is not located within a State Responsibility Area or a very high fire hazard severity zone. Neither Cal Fire nor the City of San Bernardino identify the Project site within an area susceptible to wildland fires (CalFire, 2023; City of San Bernardino, 2005a, Figure S-9). As a condition of Project approval, the Project would be required to be constructed in accordance with the California Building Standards Code (CBSC, Title 24, Part 11 of the California Code of Regulations) and the City of San Bernardino Building Code (Chapter 15.04 of the City of San Bernardino Municipal Code), which incorporates the CBSC with minor exceptions and changes to ensure applicability of the requirements within the City of San Bernardino (City of San Bernardino, 2023). The Building Code requires a minimum level of fire protection facilities, such as fire sprinklers and hydrants. Additionally, site improvements, including irrigated landscaping, would reduce the Project's potential to cause or be affected by wildland fire hazards. As such, impacts would be less than significant.

#### 5.4.8 HYDROLOGY AND WATER QUALITY

**Threshold a:** *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

##### Construction-Related Water Quality

According to a site-specific Preliminary Drainage Report prepared for the Project Site by Kimley-Horn and dated June 2023 (EIR *Technical Appendix JI*), impacts to hydrology and water quality would be less than significant. Construction of the Project would involve site preparation, grading, paving, utility installation, building construction, and landscaping activities, which have the potential to generate water quality pollutants such as silt, debris, organic waste, and chemicals (e.g., paints, solvents). Should these materials come into contact with water that reaches the groundwater table or flows off-site to a public storm drain, the potential exists for the Project's construction activities to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction in the absence of any protective or avoidance measures. However, pursuant to the requirements of the Santa Ana RWQCB and City of San Bernardino (San Bernardino Municipal Code Chapter 8.80), the Project Applicant would be required to obtain coverage under the State's General Construction Storm Water Permit for construction activities (NPDES permit), which would reduce impacts to less than significant. (RWQCB, 2010)

An NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one acre of total land area. In addition, the Project Applicant would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) for construction-related activities. The SWPPP would specify the Best Management Practices (BMPs) that the Project's construction contractors would be required to implement during construction activities to ensure that potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the proposed



Project does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant. (RWQCB, 2010)

#### Post Development Water Quality

Storm water pollutants that may be produced during Project operation include pathogens (bacterial/virus), phosphorous, nitrogen, sediment, metals, oil/grease, trash/debris, pesticides/herbicides, and other organic compounds. To meet the requirements of the County's NPDES permit and in accordance with Chapter 8.80 (Storm Water Drainage System) of the City of San Bernardino Municipal Code, the Project Applicant would be required to prepare and implement a Water Quality Management Plan (WQMP). A WQMP is a site-specific post-construction water quality management program designed to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters, via Best Management Practices (BMPs). Implementation of the WQMP ensures on-going, long-term protection of the watershed basin. Compliance with the required WQMP would be required as a condition of approval for the Project. Long-term maintenance of on-site water quality features also would be required as a condition of approval to ensure the long-term effectiveness of all on-site water quality features.

Additionally, the NPDES program requires certain land uses, including the industrial land use proposed by the Project, to prepare a SWPPP for operational activities and to implement a long-term water quality sampling and monitoring program, unless an exemption has been granted. The Project Applicant or any successor in interest would be required to prepare a SWPPP for operational activities and implement a long-term water quality sampling and monitoring program or receive an exemption. Because the permit is dependent upon a detailed accounting of all operational activities and procedures, and the SWPPP (or exemption thereto) would be prepared at the time the Project's building users and their operational characteristics are known. However, based on the performance requirements of the NPDES Industrial General Permit, it is reasonably assured that mandatory compliance with all applicable water quality regulations would further reduce potential water quality impacts during the Project's long-term operation. (RWQCB, 2010)

Based on the foregoing analysis, implementation of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during long-term operation. Impacts would be less than significant.

***Threshold b: 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?***

The Project would be served with potable water from the City of San Bernardino Municipal Water Department, and the Project Applicant does not propose the use of any wells or other groundwater extraction activities. Therefore, the Project would not directly draw water from the groundwater table. Accordingly, implementation of the proposed Project would not directly deplete or decrease groundwater supplies and the Project's impact to groundwater supplies would be less than significant.



According to a Preliminary Drainage Report prepared for the Project Site by Kimley-Horn and dated June 2023 (EIR *Technical Appendix JI*), development of the Project would increase impervious surface coverage on the Project Site, which would, in turn, reduce the amount of water percolating down into the underground aquifer that underlies the Project site and surrounding areas (i.e., Bunker Hill Groundwater Basin). The Bunker Hill Basin is a part of the San Bernardino Basin Area, and is among the most rigorously managed groundwater basins in the State. Planning and management efforts evaluating needs and supplies have been established for most of the basins within the watershed through the next 20 to 40 years. Groundwater extractions and conditions are monitored and tracked by the Western-San Bernardino Watermaster and the Basin Technical Advisory Committee. Groundwater is managed in accordance with a legal settlement that, in part, identifies a natural safe yield and requires groundwater replenishment if cumulative extractions exceed water rights allocation. (WSC, 2017, pp. 2-7 to 2-8) Due to the extensive management of the groundwater basin, implementation of the Project would not interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Additionally, the Project includes design features that would maximize the percolation of on-site storm water runoff into the groundwater basin, such as a detention basin and permeable landscape areas. Furthermore, runoff from the Project Site would be conveyed to existing drainage facilities, which ultimately would convey flows to downstream areas where infiltration would occur (e.g., the Santa River and Prado Dam). Accordingly, buildout of the Project with these design features would not interfere substantially with groundwater recharge of the Bunker Hill Groundwater Basin. Impacts would be less than significant.

**Threshold c.(i):** *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?*

According to a hydrology study prepared by Kimley-Horn, titled Preliminary Drainage Report and dated June 2023 (EIR *Technical Appendix JI*), the Project would alter existing ground contours of the Project Site and install impervious surfaces, which would result in changes to the site's existing, internal drainage patterns. Although the Project would alter the subject property's internal drainage patterns, such changes would not result in substantial erosion or siltation on- or off-site – either during construction or during long-term operation – as described under the response to Threshold 5.4.6(a). Accordingly, implementation of the Project would result in a less than significant impact due to erosion and siltation. (Kimley-Horn and Associates, 2023)

**Threshold c.(ii):** *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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*

A hydrology study prepared by Kimley-Horn, titled Preliminary Drainage Report and dated June 2023 (EIR *Technical Appendix JI*), demonstrates that the Project would not result in a substantial change in the rate or amount of runoff from the Site. Water running off the site is required to be equal to or less than what occurs under the existing condition. The Project is designed such that water runoff from the site would be conveyed



via an underground storm drain system, precluding the potential for flooding on-or off-site as a result of the Project. (Kimley-Horn and Associates, 2023)

**Threshold c.(iii)** *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 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?*

As indicated under the analysis of Threshold 5.4.6(c)(ii), a hydrology study prepared by Kimley-Horn, titled Preliminary Drainage Report and dated June 2023 (EIR *Technical Appendix JI*), has been prepared for the Project and demonstrates that the Project would not exceed the capacity of the existing or planned stormwater drainage system. Water running off the site is required to be equal to or less than what occurs under the existing condition. (Kimley-Horn and Associates, 2023)

**Threshold c.(iv):** *Would the Project impede or redirect flood flows?*

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C8701J, the Project Site is located within “Flood Zone X (unshaded),” which includes “Areas determined to be outside the 0.2% annual chance floodplain” (FEMA, 2016). Accordingly, development on the Project Site would have no potential to place housing, or other structures, within a 100-year floodplain or impede or redirect flood flows within a 100-year floodplain. No impact would occur.

**Threshold d:** *In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?*

The Project Site is located approximately 1.2-mile north of the Santa Ana River, and 50 miles northeast of the Pacific Ocean (Google Earth, 2023). Accordingly, the Project Site is not susceptible to impacts associated with tsunamis, and there are no large bodies of water in the Project vicinity capable of producing seiches that could affect the Project Site. Accordingly, the Project would not risk release of pollutants due to inundation. No impact would occur.

**Threshold e:** *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06071C8701J, the Project Site is located within “Flood Zone X (unshaded),” which includes “Areas determined to be outside the 0.2% annual chance floodplain” (FEMA, 2016). Accordingly, development on the Project Site would have no potential to place housing, or other structures, within a 100-year floodplain or impede or redirect flood flows within a 100-year floodplain. No impact would occur.



#### 5.4.9 LAND USE AND PLANNING

***Threshold a: Would the Project physically divide an established community?***

Development of the Project would not physically disrupt or divide the arrangement of an established community. 6<sup>th</sup> Street forms the northern boundary of the Project Site; 5<sup>th</sup> Street forms the southern boundary of the Project Site; Sterling Avenue forms the western boundary to the Project Site; and property to the east of the Project Site consists of commercial land uses and a few single-family homes (separated from the Project Site by the commercial land uses). Due to the existing barriers that already separate the Project Site from abutting properties, implementation of the Project would not result in the physical disruption or division of an established community. No impact would occur.

***Threshold b: Would the 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?***

The Project Site is designated for Industrial (I) land use by the City's General Plan and is zoned Industrial Light (IL) (City of San Bernardino, 2005a; City of San Bernardino, 2021). The Project would be consistent with the site's underlying General Plan land use and zoning designations and would comply with applicable policies contained in the General Plan as well as all applicable development regulations/development standards contained in the Zoning and Development Code. Accordingly, the Project would not conflict with the City's General Plan or Zoning and Development Code. The Project would otherwise not conflict with any goals, policies, or objectives of applicable local or regional plans.

#### 5.4.10 MINERAL RESOURCES

***Threshold a: 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?***

The Project Site is classified as Mineral Resources Zone 2 (MRZ-2), which is defined by the CGS as an area where geologic data indicate that significant mineral deposits (aggregate resources) are present (City of San Bernardino, 2005a, p. 12-12 and Figure NRC-3). However, the Project Site is not planned for mining uses based on the site's existing General Plan land use designations and zoning classifications, none of which allow for mineral resources extraction. Thus, although the Project Site occurs within MRZ-2, mining activities would not be compatible with existing and planned surrounding land uses. Furthermore, mining of the site would result in the establishment of a large pit at a substantially lower elevation than surrounding properties, which is not desirable within the urban context of the Project area or the streetscape desired along 5<sup>th</sup> Street, 6<sup>th</sup> Street, or Sterling Avenue by the City of Highland or the City of San Bernardino. Accordingly, mining on the Project Site is not compatible with existing zoning and the surrounding context, and therefore is not feasible. Accordingly, Project impacts due to the loss of known mineral resources would be less than significant.



***Threshold b: 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?***

The Project Site is not identified as a locally-important mineral resources recovery site by the City of San Bernardino's General Plan or any other land use plan. As such, the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan or other land use plan. Impacts would be less than significant.

#### 5.4.11 NOISE

***Threshold c: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

There are no private airstrips in the City of San Bernardino and there are no private airstrips within two miles of the Project Site (City of San Bernardino, 2005a, p. 6-14). The nearest airport is the San Bernardino International Airport (SBIA) which is located 0.2-mile south of the Project Site. The Federal Aviation Administration (FAA) has issued a Determination of No Hazard to Air Navigation (FAA, 2023). The Project Site occurs outside of the 65 dBA CNEL contour for the SBIA (SBIAA, 2010, Exhibit 4-H). According to the City of San Bernardino General Plan, industrial uses such as those proposed as part of the Project are considered "Normally Acceptable" at noise levels up to 75 dBA CNEL, while industrial land uses are considered "Conditionally Acceptable" at noise levels ranging from 70 to 80 dBA CNEL (City of San Bernardino, 2005a, Exhibit N-1). Thus, because the Project would not be subject to noise levels exceeding 65 dBA CNEL, the Project would not expose people residing or working in the area to excessive airport-related noise levels, and impacts would therefore be less than significant.

#### 5.4.12 POPULATION AND HOUSING

***Threshold a: 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)?***

The proposed Project would have a beneficial effect on the area's employment base by developing a vacant site with a new warehouse building. The new jobs generated would provide additional employment opportunities for residents in the area. The Project Site is designated by the City of San Bernardino's General Plan for Industrial Light (IL) development, and the Project does not propose any uses that would result in unplanned population growth that is not already allowed by the General Plan or planned by the City's Housing Element. Moreover, it is anticipated that any future employees generated by the Project could be accommodated by existing residential communities and/or by future residential uses to be constructed in accordance with the City's General Plan and/or the general plans of other nearby jurisdictions, and that no additional unplanned housing would be required to accommodate Project-related employees. Per Appendix 5 to the City's General Plan, lands designated for "Industrial Light (IL)" uses, as are proposed for the 25.12-gross-acre Project Site, generate approximately one employee per 1,030 s.f. of building area. Based on this



factor, the 557,000 s.f. of light industrial uses proposed as part of the Project would generate approximately 540 new, recurring jobs ( $557,000 \text{ s.f.} \div 1,030 \text{ s.f./employee} = 540 \text{ employees}$ ). The City's Draft Housing Element (2021-2029) dated January 2024, shows that the City's population is projected to grow by approximately 8,400 persons between 2020 and 2039 (City of San Bernardino, 2024, Table 2-1). As such, planned jobs do not exceed planned population growth. Additionally, the Project's utility, drainage, and other improvements are designed to serve only the proposed Project, and would not induce growth indirectly on any other parcels within the Project vicinity. A less than significant impact would occur.

**Threshold b:** *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

Under existing conditions, there are no homes on the Project Site and the Project Site does not contain any existing residents. Therefore, there would be no displacement of existing people or housing, and no impact would occur.

#### 5.4.13 PUBLIC SERVICES

**Threshold a.(i):** *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?*

The City of San Bernardino is served by twelve fire stations, which are maintained by the San Bernardino County Fire Protection District (SBCFPD, 2023). The nearest fire station to the Project Site is Station 233, located at 165 South Leland Norton Way, approximately 0.7-mile southwest of the Project Site. Due to the proximity of existing fire stations, the Project has no potential to cause a fire station to be physically altered or for a new fire station to be constructed.

**Threshold a.(ii):** *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?*

The Project would introduce a new building and employees to the Project Site, which would result in an incremental increase in demand for police protection services, but is not anticipated to require or result in the construction of new or physically altered police facilities. The nearest first response police station is at 710 North D Stret, San Bernardino, CA, approximately 2.8 miles west of the Project Site. Due to the proximity of existing police stations, the Project has no potential to cause a police station to be physically altered or for a new police station to be constructed.



***Threshold a.(iii): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services?***

The proposed Project would not create a direct demand for public school services, as the subject property would contain non-residential uses that would not generate any school-aged children requiring public education. Although the Project would not create a demand for additional public school services, the Project Applicant would be required to contribute development impact fees to the San Bernardino City Unified School District (SBCUSD), in compliance with California Senate Bill 50. Mandatory payment of school fees would be required prior to the issuance of a building permit. Pursuant to Senate Bill 50, payment of school impact fees constitutes complete mitigation for project-related impacts to school services. With mandatory payment of fees in accordance with California Senate Bill 50, there would be no impacts to public schools.

***Threshold a.(iv): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, need for new or physically altered park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for park services?***

The Project does not propose any type of residential use or other land use that may generate a population that would result in a demand for parkland resources, and no recreational facilities are proposed as part of the Project. Thus, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered recreational facilities, or due to the need for new or physically altered recreational facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks and recreational resources. No impact would occur.

***Threshold a.(v): Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public facilities?***

The Project would not directly substantially increase the residential population in the City, and therefore is not expected to result in a demand for other public facilities/services, including libraries, community recreation centers, post offices, and animal shelters. As such, implementation of the proposed Project would not adversely affect other public facilities or require the construction of new or modified public facilities and no impact would occur.



#### 5.4.14 RECREATION

***Threshold a: Would the Project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

The Project does not involve any type of residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities. Accordingly, implementation of the proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park, and no impact would occur.

***Threshold b: 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?***

The Project does not involve the construction of any new on- or off-site recreation facilities. The Project would not expand any existing off-site recreational facilities. Therefore, no impacts related to the construction or expansion of recreational facilities would occur with implementation of the proposed Project.

#### 5.4.15 TRANSPORTATION

***Threshold c: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

All improvements planned as part of the Project would be in conformance with applicable City of San Bernardino and City of Highland standards and would not result in any hazards due to a design feature. Additionally, the Project is surrounded by a mixture of industrial, commercial, aviation, and residential land uses and undeveloped land and as such the Project would not represent an incompatible use that could increase transportation-related hazards in the local area. Therefore, the Project would not substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and impacts would be less than significant.

***Threshold d: Would the Project result in inadequate emergency access?***

The Project Site and adjacent public roadways are not identified as a designated emergency access route. During the course of the San Bernardino County Fire Protection District's required review of the Project's applications, the Project's design is reviewed to ensure that adequate access to and from the site is provided for emergency vehicles during both construction and long-term operation. Furthermore, no existing streets would be closed on a permanent or temporary basis as a result of the Project. Temporary intermittent single lane closures along the Project Site's street frontages, if needed during Project construction, would be managed by temporary traffic controls (e.g., flaggers, cones, signage) to ensure continued traffic flow and access including for emergency vehicles. With required adherence to the County Fire Protection District requirements for emergency vehicle access, impacts are expected to be less than significant.



#### 5.4.16 UTILITIES AND SERVICE SYSTEMS

***Threshold b: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

The operation of a warehouse building on the Project Site would result in an increase in potable water demand compared to the Project Site's existing, vacant condition. The Project Site is designated by the City of San Bernardino General Plan for development with Industrial (I) land uses (City of San Bernardino, 2005a, Figure LU-2). The Project Site's existing General Plan land use designations were utilized in part to inform growth projections published by SCAG, which in turn were used as inputs in the 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (UWMP). The 2020 UWMP demonstrates that the City of San Bernardino Municipal Water Department (SBMWD) service area would be served with adequate water resources during normal, wet, dry, and multiple dry years to meet the demands associated with projected growth in residents and employment through at least 2045. Because the 2020 UWMP demonstrates that there would be adequate water resources to meet the projected demands through 2045, the SBMWD would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years (IRUWMP, 2020).

***Threshold c: 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?***

Wastewater generated by the Project would be treated at the City of San Bernardino's Water Reclamation Plant (SBWRP). According to the WRP Facilities Assessment and Master Plan, the SBWRP has a design capacity of 33 million gallons per day (MGD). In 2020, the SBWRP had a total flow of 21.5 MGD and by 2040, the flow was expected to rise to 26.4 MGD. From 1957 to July 2022, the SBWRP treated all wastewater generated by the East Valley Water District (EVWD); however, in July 2022, the EVWD opened the Sterling Natural Resource Center, which lead to a reduction in flow to the SBWRP. Factoring out EVWD contribution to influent flow, the 2040 SBWRP influent flow is expected to be 18.6 MGD, only 56.4 percent of the total daily capacity (City of San Bernardino, 2020, p. 6-4). The Project is consistent with the General Plan land use designation for the Project Site and would therefore have been included in the projections for wastewater treatment. Additionally, the warehouse use proposed as part of the Project would generate substantially less wastewater than other types of light industrial uses, because most of the building space would be occupied by goods storage inside a large warehouse, with wastewater generation sources generally limited to an employee break room and restrooms. Accordingly, implementation of the Project would not create the need for any new or expanded wastewater facilities. It is anticipated that there is adequate capacity at existing treatment facilities to serve Project demands, impacts would be less than significant, and mitigation is not required.

***Threshold d: 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?***

The City of San Bernardino contracts with Burrtec Waste Industries for solid waste services. The City of San Bernardino has no active landfills but primarily utilizes the San Timoteo and Mid-Valley landfills. According



to the EIR prepared for the City of San Bernardino 2005 General Plan Update, businesses (including the warehouse uses proposed as part of the Project) generate approximately 2.37 tons per employee per year. (San Bernardino, 2005b, pp. 5.15-16 and Table 5.15-5) Per Appendix 5 to the City of San Bernardino's General Plan, lands designated for "Industrial Light (IL)" uses, as are proposed for the 25.12-gross-acre Project Site, generate approximately one employee per 1,030 s.f. of building area. Based on this factor, the 557,000 s.f. of light industrial uses proposed as part of the Project would generate approximately 540 new, recurring jobs ( $557,000 \text{ s.f.} \div 1,030 \text{ s.f./employee} = 540 \text{ employees}$ ). (City of San Bernardino, 2005a, Appendix 5) Thus, the Project would generate approximately 1,279.8 tons per year (3.5 tons per day) of solid waste requiring disposal at the San Timoteo and/or Mid-Valley landfills. According to information available from CalRecycle, in the month of March 2023, the San Timoteo landfill experienced a peak tonnage of 1,974.3 tons per day (tpd), while this facility is allowed a maximum tonnage of 3,000 tpd for up to 15 days per calendar year (CalRecycle, 2023a). In the month of April 2023, the Mid-Valley landfill had a peak tonnage of 5,498.17 tpd, while this facility is permitted to receive up to 7,500 tpd (CalRecycle, 2023b). Thus, the 3.5 tpd generated by the Project would represent 0.34% of the available daily capacity at the San Timoteo landfill and 0.17% of the available daily capacity at the Mid-Valley landfill. Additionally, as of April 2019, the San Timoteo landfill had a remaining capacity of 12.3 million cubic yards, while as of June 2019 the Mid-Valley landfill had a remaining capacity of 61.2 million cubic yards (CalRecycle, 2023a; CalRecycle, 2023b). Accordingly, adequate capacity exists at both the San Timoteo and Mid-Valley landfills to accommodate solid waste generated by the Project. Additionally, the Project would be subject to the City of San Bernardino's solid waste regulations as set forth in Chapter 8.24 of the City of San Bernardino's Municipal Code. Chapter 8.24 includes enforceable requirements for the recycling and diversion of solid waste from the regional landfills. With mandatory compliance with Chapter 8.24 of the City of San Bernardino's Municipal Code, the Project would not 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. Impacts would be less than significant.

***Threshold e: Would the Project comply with federal, State, and local statutes and regulations related to solid waste?***

The Project would be required to comply with the City of San Bernardino's waste reduction programs, including recycling and other diversion programs to reduce the amount of solid waste deposited in landfills. As such, future building users at the Project Site would be required to work with refuse haulers to develop and implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would be required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. The implementation of these programs would reduce the amount of solid waste generated and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be subject to all federal, State, and local statutes and regulations related to solid waste. As such, a less than significant impact would occur.



#### 5.4.17 WILDFIRE

**Threshold a:** *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

A State Responsibility Area (SRA) includes lands where the State of California is financially responsible for the prevention and suppression of wildfires, and the Project Site is not located within any SRAs (CalFire, 2023). Fire protection services to the Project Site are and would continue to be provided by the San Bernardino County Fire Protection District (SBCFPD). The Project Site is not identified as part of any adopted emergency response plans or emergency evacuation plans, and the Project has no potential to conflict with any such plans. Furthermore, no existing streets would be closed on a permanent or temporary basis as a result of the Project. Temporary intermittent single lane closures along the Project Site's street frontages, if needed during Project construction, would be managed by temporary traffic controls (e.g., flaggers, cones, signage) to ensure continued traffic flow and access including for emergency vehicles. As such, no impacts to adopted emergency response plans or emergency evacuation plans would occur with implementation of the proposed Project.

**Threshold b:** *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?*

As noted under the analysis of Threshold 5.4.18(a), the Project Site is not located within any SRAs, as fire protection services in the Project area are provided by the SBCFPD. Additionally, the Project Site is located in an area that is largely urbanized and contains no large and continuous open space areas that have the potential for wildland fire hazards. The Project would result in construction and operation of a large warehouse building with exterior impervious surfaces and irrigated landscaping, which would not result in any increase in fire hazards in the local area. Wildfire hazards would be reduced with conversion of the vacant Project Site to a developed warehouse use. Therefore, the Project has no potential to exacerbate wildfire risks, and thereby exposing people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. A less than significant impact would occur.

**Threshold c:** *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?*

The Project Site is not located within a portion of the City of San Bernardino that is subject to wildfire hazards, and the Project Site is not located within any SRAs. Aside from standard building construction requirements, including the installation of fire sprinklers, the provision of fire hydrants, and the use of irrigated landscaping, the Project does not include any fire protection-related infrastructure that could result in temporary or ongoing impacts to the environment. Wildfire hazards would be reduced with conversion of the vacant Project Site to a developed warehouse use. No impact would occur.



***Threshold d: 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?***

The Project Site is not located within a portion of the City of San Bernardino that is subject to wildfire hazards, and the Project Site is not located within any SRAs. The Project Site occurs in a portion of the City of San Bernardino that exhibits generally flat topography, and there are no large slopes in the Project vicinity that could be subject to landslide hazards as a result of post-fire slope instability. Additionally, there are no components of the Project that could result in or exacerbate flooding hazards associated with wildland fire hazards. Wildfire hazards would be reduced with conversion of the vacant Project Site to a developed warehouse use. No impacts would occur.



## 6.0 ALTERNATIVES

Pursuant to State CEQA Guidelines Section 15126.6(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 selection of 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.*

As discussed in Section 4.0 of this EIR, the Project would result in a significant adverse environmental effect under one environmental issue area that cannot be mitigated to below a level of significance after the implementation of Project design features, mandatory regulatory requirements, and feasible mitigation measures. The unavoidable significant impact is:

- Transportation: Significant and Unavoidable Direct and Cumulatively-Considerable Impact. Although the analysis of the Project's potential impacts to VMT based on the Boundary VMT method were determined to be less than significant, the Project would exceed the City's significance thresholds based on the OD Method under both baseline (2023) and cumulative (2040) conditions. Although the Project would be subject to compliance with Mitigation Measure MM 4.8-1, which would reduce the Project's VMT, the effectiveness of commute trip reduction measures such as those listed in Mitigation Measure MM 4.8-1 cannot be guaranteed to reduce Project VMT to a level of less than significant. No additional feasible mitigation measures are available to measurably reduce the Project's VMT. Therefore, the Project's VMT impacts are considered significant and unavoidable on both a direct and cumulatively-considerable basis.

### 6.1 PROJECT OBJECTIVES

As previously listed in EIR Section 3.0, the Project's basic Objectives are:

- A. To expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas.
- B. To attract new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment.



- C. To develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property.
- D. To improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities.
- E. To develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that are complementary to other existing and planned industrial developments in the local area.
- F. To attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

## **6.2 ALTERNATIVES UNDER CONSIDERATION**

State CEQA Guidelines Section 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the Project site in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., “No Project” Alternative). For projects that include a revision to an existing land use plan, the “No Project” Alternative may be the continuation of the existing land use plan into the future. For projects other than a land use plan (for example, a development project on an identifiable property), the “No Project” Alternative is considered to be a circumstance under which the project does not proceed (State CEQA Guidelines Section 15126(e)(3)(A-B)). Because the Project includes only a site-specific development proposal that is fully consistent with the site's adopted land use designations, this EIR evaluates a “No Development Alternative (NDA),” which assumes that the Project site remains in its current undeveloped condition.

In compliance with State CEQA Guidelines Section 15126.6(a), an EIR must 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.” The EIR need not consider every conceivable alternative; rather it must consider a reasonable range of potentially feasible alternatives to the project, or to the location of the project, which would avoid or substantially lessen 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” (State CEQA Guidelines Section 15126.6(b)).

The following scenarios are identified by the City of San Bernardino as potential alternatives to implementation of the proposed Project. The Reduced Project Alternative is considered the Environmentally Superior Alternative pursuant to State CEQA Guidelines § 15126.6.



### 6.2.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative (NDA) considers no development on the Project Site beyond what occurs on the site under existing conditions. Under this Alternative, the approximately 25.12-acre site would remain vacant and undeveloped for the foreseeable future. The Project Site would be subject to routine maintenance (i.e., disking) for weed abatement. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project Site in its existing condition.

### 6.2.2 REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative (RPA) considers the development of the Project Site with one high cube warehouse building, but the proposed building would be reduced in size from approximately 557,000 s.f. under the proposed Project to approximately 471,000 s.f. under the RPA (representing a reduction in building area by approximately 15.4%). Under the RPA, the number of passenger vehicle parking spaces, located to the west of the proposed warehouse building, would be increased from 258 spaces provided under the proposed Project to 291 spaces under the RPA. The number of truck trailer parking stalls would be decreased from 108 spaces provided under the proposed Project to 84 spaces under the RPA. Similarly, the number of loading dock doors would be decreased from 80 spaces provided under the proposed Project to 61 spaces under the RPA. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the size of the building and thereby reduce the Project's significant and unavoidable impacts to transportation (VMT), although impacts would not be reduced to less-than-significant levels. The Reduced Project Alternative is identified as the Environmental Superior Alternative that meets a majority of the Project's objectives.

### 6.2.3 TRUCK TRAILER STORAGE LOT ALTERNATIVE

The Truck Trailer Storage Lot Alternative considers a scenario where the Project Site is developed as a truck and trailer parking lot, accommodating approximately 900 truck trailer parking spaces. The entire Project Site would be developed for parking and landscaping would occur around the perimeter of the site for screening purposes. This alternative was selected to evaluate a scenario that would allow productive industrial use of the entire Project site while not developing a structure other than security booths at the entrance and exit gates.

## 6.3 ALTERNATIVES CONSIDERED AND REJECTED

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by State CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are: a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the Project, State CEQA Guidelines Section 15126.6(f)(1) notes:

*“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries...and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site...”*



In determining an appropriate range of alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and, for a variety of reasons, rejected. Alternatives were rejected because either: 1) they could not accomplish the basic objectives of the Project, 2) they would not have resulted in a reduction of significant adverse environmental impacts, or 3) they were considered infeasible to construct or operate. A summary of the alternatives that were considered but rejected are described below.

### 6.3.1 SMALL BUILDING ALTERNATIVE

A Small Building Alternative was considered by rejected, which evaluated development of a portion of the Project Site with one, small, 78,350 s.f. building (representing a reduction in building area by approximately 85.9% compared to the proposed Project). Due to the substantially smaller building size, this alternative would result in developing an approximately 7.0-acre portion of the Project Site. This alternative was selected by the Lead Agency in order to evaluate an alternative that would screen out of the requirement to prepare a vehicle miles travelled (VMT) assessment and meet the small project screening criteria. This alternative was rejected for failure to meet the Project's objectives C, D, and F listed above in section 6.1 since the alternative does not maximize the floor area ratio per regulatory allowances to take full advantage of the development potential of the property and would not require the street frontage improvements. In addition, the small building alternative does not fully realize Project objectives A and B listed above in section 6.1 as fewer jobs and economic development would occur with the smaller building.

### 6.3.2 ALTERNATIVE SITES

CEQA does not require that an analysis of alternative sites be included in an EIR. However, if the surrounding circumstances make it reasonable to consider an alternative site, then an alternative sites analysis should be considered and analyzed in the EIR. In making the decision to include or exclude an analysis of an alternative site, the "key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR" (State CEQA Guidelines Section 15126.6(f)(2)).

Based on the analysis presented in EIR Section 4.0, *Environmental Analysis*, the proposed Project would result in a significant and unavoidable direct and cumulatively-considerable impact due to vehicle miles traveled (VMT). Given the Project Site's relatively close proximity to regional transportation corridors (i.e., I-215, I-10, SR-210), development of the Project Site at an alternative location could result in an increase in VMT if developed on a property located further from regional transportation facilities. As noted above, only locations that would avoid or substantially lessen a Project's significant environmental effects need to be considered in an EIR. Furthermore, the Project Site is designated "Industrial Light" by the City of San Bernardino General Plan and is also zoned "Industrial Light." As such, the proposed Project is a permitted use. If the proposed Project were to be developed on an alternative site, the Project Site would still remain developable for the same or similar use, thereby compounding and not alleviating environmental effects. Accordingly, because development of the Project Site at an alternative site location would not reduce or avoid the Project's significant and unavoidable direct and cumulatively-considerable impacts due to VMT, a more detailed analysis of alternative site locations is not warranted.



## 6.4 ALTERNATIVE ANALYSIS

The discussion on the following pages compares the environmental impacts expected from each alternative considered by the Lead Agency relative to the impacts of the Project. A conclusion is provided for each topic as to whether the alternative results in one of the following: (1) reduction of elimination of the Project's impact, (2) a greater impact than would occur under the Project, (3) the same impact as the Project, or (4) a new impact in addition to the Project's impacts. Table 6-1, *Alternatives to the Project – Comparison of Environmental Impacts*, at the end of this Section compares the impacts of the alternatives against those of the Project and identifies the ability of the alternatives to meet those basic objectives of the Project.

### 6.4.1 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative (NDA) allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were left in its existing undeveloped condition for the foreseeable future. Under existing conditions, the Project Site is vacant and undeveloped and where vegetation is present, it consists of non-native grassland and ruderal species. The Project Site would continue to be subject to routine maintenance (i.e., discing) for weed abatement. Refer to the description of the Project Site's existing physical conditions in Section 2.0, Environmental Setting, of this EIR. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the Project Site in its existing undeveloped condition.

#### **A. Air Quality**

Under the NDA, there would be no development on the Project Site. As such, the Project's near-term construction- and operational-related air quality emissions would be avoided under this alternative. Thus, implementation of the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to regional criteria pollutant emissions, and also would avoid the Project's less-than-significant impacts (after mitigation) related to consistency with the SCAQMD 2022 AQMP. The Project's less-than-significant impacts due to localized air quality emissions also would be avoided under this alternative. Thus, impacts to air quality would be reduced under the NDA in comparison to the Project.

#### **B. Biological Resources**

Under the NDA, there would be no construction or development on the Project Site. Because the Project Site would be left in an undeveloped state in perpetuity, the NDA would avoid the Project's less-than-significant impacts (after mitigation) to nesting birds should they be present during construction activities. Thus, potential impacts to biological resources would be avoided under the NDA in comparison to the Project.

#### **C. Cultural Resources**

Under the NDA, there would be no construction or development on the Project Site. Although the Project would not result in impacts to any known historical resources, the NDA would nonetheless avoid the Project's less-than-significant impacts (after mitigation) to subsurface historical resources that may be encountered during grading activities. Similarly, although there are no known significant archaeological resources on site,



the NDA would avoid the Project's less-than-significant impacts to subsurface archaeological resources that may be impacted during site grading operations. Thus, potential impacts to cultural resources would be avoided under the NDA in comparison to the Project.

***D. Energy***

Under the NDA, there would be no increase in demand from the Project Site for energy resources. As such, the NDA would avoid the Project's less-than-significant impacts due to the consumption of energy resources. Similarly, the NDA would avoid the Project's less-than-significant impacts related to consistency with a State or local plan for renewable energy or energy efficiency. Thus, energy impacts would be avoided under the NDA in comparison to the Project because the NDA would not result in an increase in use of energy resources.

***E. Geology and Soils***

Under the NDA, there would be no construction or development on the Project Site. Because no new development would occur, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to potential seismic-related ground failure and soil that is unstable or has the potential to become unstable. Thus, impacts to geology and soils would be avoided under the NDA in comparison to the Project.

***F. Greenhouse Gas Emissions***

Under the NDA, there would be no construction or development on the Project Site. As such, there would be no increase in GHG emissions from the Project Site under the NDA. Accordingly, the NDA would avoid the Project's less-than-significant impacts (after mitigation) due to GHG emissions. Similarly, the Project's less-than-significant impacts due to consistency with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs also would be avoided with implementation of the NDA. Thus, impacts related to GHG emissions would be avoided under the NDA in comparison to the Project.

***G. Noise***

Under the NDA, there would be no construction or development on the Project Site and the Project Site would remain vacant. As such, implementation of the NDA would avoid the Project's less-than-significant noise impacts due to construction and operational activities. Similarly, implementation of the NDA would avoid the Project's less-than-significant impacts due to groundborne vibration or groundborne noise levels during both construction and operation. Thus, noise-related impacts would be avoided under the NDA in comparison to the Project.

***H. Transportation***

Under the NDA, there would be no development on the Project Site, and the Project Site only would generate nominal amounts of traffic associated with site maintenance and discing activities. The NDA would not result in roadway frontage improvements to 5<sup>th</sup> Street, 6<sup>th</sup> Street, and Sterling Avenue that would occur under the Project and in compliance with the City's General Plan. As such, the NDA would be in potential conflict with the City's General Plan, which calls for these roads to be improved to General Plan standards, including roadway widening and the installation of ADA compliant sidewalks and Class II and III bike lanes. The NDA



would neither advance nor preclude transportation system improvements. Because no new traffic would be generated under the NDA, the NDA would avoid the Project's significant and unavoidable direct and cumulatively-considerable transportation impacts due to employee-related VMT. Thus, transportation-related impacts would be reduced to less-than-significant levels under the NDA in comparison to the Project.

***I. Tribal Cultural Resources***

Under the NDA, there would be no construction or development on the Project Site. Although the Project would not result in impacts to any known tribal cultural resources, the NDA would nonetheless avoid the Project's less-than-significant impacts (after mitigation) to subsurface resources that may be encountered during grading activities. Thus, potential impacts to tribal cultural resources would be avoided under the NDA in comparison to the Project.

***J. Utilities and Service Systems***

Under the NDA, there would be no increased demand for water, wastewater treatment, stormwater drainage, or dry utilities; thus, the NDA would avoid the Project's potential impacts due to the construction of such facilities and due to the provision of water or wastewater treatment services. There would be no increase in demand for water resources under the NDA; thus, the NDA would avoid the Project's less-than-significant impacts to water supply. Additionally, the NDA would avoid the Project's less-than-significant impacts due to the construction of wastewater conveyance facilities on and off site, and would avoid the Project's less-than-significant impacts to wastewater treatment capacity. The NDA also would avoid the Project's less-than-significant impacts (with mitigation) due to the construction of facilities for electricity, natural gas, communication systems, and street lighting, and due to increased roadway maintenance. Thus, impacts to utilities and service systems, including for the installation of an off-site electrical line, would be avoided under the NDA in comparison to the Project.

***K. Conclusion***

Implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. All effects of the proposed Project would be avoided or lessened by the selection of the NDA. However, the NDA would not facilitate roadway frontage improvements along 6<sup>th</sup> Street, 5<sup>th</sup> Street, and Sterline Avenue as called for by the City's General Plan. Because this alternative would avoid the Project's adverse environmental effects, it warrants consideration as the "environmentally superior alternative." However, pursuant to State CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Reduced Project Alternative (RPA), as discussed in Subsection 2, is identified as the environmentally superior alternative because it reduces the environmental impacts compared to the Project and meets a majority of the Project's objectives, although to a lesser extent than the Project. It should be noted that the Reduced Project Alternative does not reduce the VMT impact to less than significant and such Project Alternative would require a Statement of Overriding Considerations if approved.



The NDA would fail to meet all of the Project's objectives. Specifically, the NDA would not expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas. The NDA also would not attract new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment. In addition, the NDA would not develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property. Additionally, the NDA would not improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities. The NDA also would not develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that complement other existing and planned industrial developments in the local area. Lastly, the NDA would not attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

#### **6.4.2 REDUCED PROJECT ALTERNATIVE**

The RPA considers a scenario where, similar to the proposed Project, one high cube warehouse building would be developed, but the proposed building would be reduced in size from approximately 557,000 s.f. under the proposed Project to approximately 471,000 s.f. under the RPA (representing a reduction in building area by approximately 15.4%). The passenger vehicle parking area on the west side of the proposed building would increase in size from 258 spaces provided under the proposed Project to 291 spaces under the RPA. The number of truck trailer parking stalls would be decreased from 108 spaces provided under the proposed Project to 84 spaces under the RPA. Similarly, the number of loading dock doors would be decreased from 80 spaces provided under the proposed Project to 61 spaces under the RPA. The remaining areas on the Project Site would contain landscaping, drive aisles, and other features to support building operations. No portions of the Project Site would be left vacant and all infrastructure improvements on and off-site would be identical to the proposed Project. This alternative was selected by the Lead Agency in order to evaluate an alternative that would reduce the size of the building and thereby reduce the Project's significant and unavoidable impacts to transportation (VMT), although impacts would not be reduced to less-than-significant levels.

##### **A. Air Quality**

With implementation of the RPA, there would be a reduction in the amount of building area on the Project Site. As such, implementation of the RPA would reduce the Project's less-than-significant impacts (after mitigation) due to regional criteria pollutant emissions, and also would reduce the Project's less-than-significant impacts (after mitigation) due to consistency with the SCAQMD 2022 AQMP. Thus, impacts to air quality would be reduced under the RPA in comparison to the Project.

##### **B. Biological Resources**

Under the RPA, all portions of the Project Site would be subject to physical disturbance during construction and long-term operation. As such, implementation of the RPA would result in similar less-than-significant



impacts (after mitigation) to nesting birds during construction activities. Thus, impacts to biological resources would be similar to the proposed Project under the RPA.

### **C. Cultural Resources**

Areas planned for physical disturbance under the RPA would be identical to the proposed Project. Accordingly, the RPA would result in similar less-than-significant impacts (after mitigation) to subsurface historical resources that may be encountered during grading activities. Additionally, although there are no known significant archaeological resources on site, the RPA would result in similar less-than-significant impacts to subsurface archaeological resources that may be impacted during site grading operations. Thus, impacts to biological resources would be similar to the proposed Project under the RPA.

### **D. Energy**

Under the RPA, the Project Site would be developed with up to 471,000 s.f. of building area, which represents a 15.4% reduction in building area in comparison to the 557,000 s.f. of building area proposed as part of the Project. Accordingly, implementation of the RPA would result in a reduction in the amount of energy demand generated by the Project Site during both construction and long-term operation, although impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources, and due to conflict with a State or local plan for renewable energy or energy efficiency, would be less than significant under both the RPA and proposed Project. Thus, impacts to energy would be reduced under the RPA in comparison to the Project.

### **E. Geology and Soils**

Areas planned for grading and development under the RPA would be similar to the proposed Project, although the RPA would result in less building area in comparison to the Project. Due to the reduction in building area, the RPA would result in an overall reduction in impacts due to geology and soils in comparison to the Project, although as with the Project all impacts to geology and soils would be reduced to less-than-significant levels with implementation of mitigation measures. Thus, impacts to geology and soils would be reduced under the RPA in comparison to the Project.

### **F. Greenhouse Gas Emissions**

Under the RPA, the Project Site would be developed with up to 471,000 s.f. of building area, which represents a 15.4% reduction in building area in comparison to the 557,000 s.f. of building area proposed as part of the Project. As such, implementation of the RPA would reduce the Project's less-than-significant impacts to GHG emissions (with mitigation) due to the reduction in building area that would occur under the RPA. Accordingly, neither the Project nor the RPA would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, resulting in similar less-than-significant impacts. Thus, impacts to GHG emissions would be reduced under the RPA in comparison to the Project.

### **G. Noise**

Under the RPA, the Project Site would be developed with 471,000 s.f. of building area, which is less than the 557,000 s.f. of building area proposed as part of the Project. The RPA would result in reduced impacts due to



construction-related and operational noise levels. Additionally, the RPA would reduce the Project's less-than-significant impacts due to construction-related vibration, and also would reduce the Project's less-than-significant impacts due to operational-related vibration. Thus, noise-related impacts would be reduced under the RPA in comparison to the Project.

#### ***H. Transportation***

Under the RPA, the Project Site would be developed with 471,000 s.f. of building area, which is less than the 557,000 s.f. of building area proposed as part of the Project. The RPA would be similar as the proposed Project related to consistency with programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, because fewer vehicles would be generated under the RPA, the Project's significant and unavoidable impacts to transportation (VMT) would be reduced, although impacts would not be reduced to less-than-significant levels. As shown in Subsection 4.8, *Transportation*, the Project's VMT per service population is above the City threshold for baseline condition and is above the City's threshold for the cumulative conditions. A reduction of approximately 15.4% in building size would be enough to reduce the VMT impacts to less than significant.

#### ***I. Tribal Cultural Resources***

Under the RPA, areas subject to grading and development would be similar to the proposed Project. Accordingly, impacts to Tribal Cultural Resources would be similar under the Project and RPA, and would be less than significant.

#### ***J. Utilities and Service Systems***

Under the RPA, the Project Site would be developed with 471,000 s.f. of building area, which is less than the 557,000 s.f. of building area proposed as part of the Project. Under the RPA there would be a reduced demand for water and wastewater treatment and dry utility provision in comparison to the Project; regardless, the RPA would result in the same physical environmental impacts due to the construction of water, wastewater conveyance and treatment, and dry utility lines and facilities. Because drainage facilities would be similar under the Project and RPA, impacts due to the construction of storm drain facilities would be similar and would be less than significant. There would be less increase in demand for water resources under the RPA; thus, the RPA would result in reduced impacts to water supply in comparison to the Project. Additionally, the RPA would result in reduced impacts due to the construction of wastewater conveyance facilities on and off site, and would result in reduced impacts to wastewater treatment capacity. There would be less wastewater generated under the RPA in comparison to the Project; thus, the RPA would result in reduced impacts due to solid waste as compared to the Project. The RPA would result in the same physical impacts due to the construction of facilities for electricity, natural gas, communication systems, and street lighting, and due to potentially increased roadway maintenance.

#### ***K. Conclusion***

As compared to the Project, the RPA would result in reduced impacts under the issues of air quality, energy, geology and soils, GHG emissions, noise, transportation, and utilities and service systems. While the RPA would reduce the Project's significant and unavoidable impacts to transportation (VMT), impacts would not



be reduced to less-than-significant levels. Implementation of the RPA would result in similar impacts to the proposed Project under the issue areas of biological resources, cultural resources, and tribal cultural resources. The RPA would not result in any increased impacts to the environment in comparison to the proposed Project. Accordingly, the Reduced Project Alternative (RPA), as discussed in Subsection 6.2.2, is identified as the environmentally superior alternative.

The RPA would meet the Project's objectives, but generally to a lesser extent. Due to the reduction in building area, the RPA would be less effective than the proposed Project in expanding economic development, facilitating job creation, and increasing the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas. Similarly, due to the reduction in building area, the RPA would be less effective than the proposed Project in attracting new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment. In addition, the RPA would be less effective than the proposed Project in developing a vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property. The RPA would meet the Project's objectives to improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities. The RPA also would meet the Project's objectives to develop a General Plan and zone-conforming industrial use that complements other existing and planned industrial developments in the local area. Lastly, the RPA would meet the Project's objectives to attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

### **6.4.3 TRUCK TRAILER STORAGE LOT ALTERNATIVE**

The Truck Trailer Storage Lot Alternative allows decision-makers to compare the environmental impacts of approving the Project to the environmental impacts that would occur if the property were developed with an approximate 900-space truck and trailer parking lot serving a local business or businesses. Under this Alternative, the entire Project Site would be developed for parking and landscaping would occur around the perimeter of the site for screening purposes. Under a reasonably foreseeable circumstance of truck trailer parking lots attracting 43 vehicle trips per acre per day, the lot is calculated to generate approximately 1,080 vehicle trips per day (43 x 25.12 acres), with a high percentage of those trips being trucks. This alternative assumes that the lot would serve a local business or business within a 10-mile radius of the Project Site. This alternative was selected to evaluate a scenario that would allow productive industrial use of the Project Site while not developing a structure other than security booths at the entrance and exit gates.

#### **A. Air Quality**

Under the Truck Trailer Storage Lot Alternative, the Project Site would be developed with a truck trailer parking lot, resulting in potentially increased air pollutant emissions compared to the Project due to a greater number of vehicle trips, but because the alternative assumes that trip lengths would be fewer than 10 miles, it would be reasonably expected that air pollutant emissions would be lower than the Project due to the shorter



trip length. Both the proposed Project and the Truck Trailer Storage Lot Alternative would have the same potential for exposing sensitive receptors to substantial pollutant concentrations, thus this Alternative would not avoid or reduce the Project's less-than-significant (after mitigation) localized air quality impacts.

***B. Biological Resources***

The Truck Trailer Storage Lot Alternative would develop the entire Project Site and would result in identical impacts to biological resources as the Project. This Alternative would require the same mitigation as the Project and, after mitigation, both the proposed Project and the Truck Trailer Storage Lot Alternative would result in less-than-significant impacts to biological resources.

***C. Cultural Resources***

The Truck Trailer Storage Lot Alternative would develop the entire Project Site and would result in the same impacts to cultural resources as the Project, although depth of grading would be shallower reducing the potential for resource discovery. This Alternative would require the same mitigation as the Project and, after mitigation, both the proposed Project and Truck Trailer Storage Lot Alternative would result in less than significant impacts to cultural resources.

***D. Energy***

Like the proposed Project, development that would occur under the Truck Trailer Storage Lot Alternative would consume energy resources, although energy consumption related to operation of the warehouse building would be omitted and replaced with a less energy use intensive local-serving truck trailer parking lot. Less fuel consumption would occur related to construction and less fuel consumption would occur associated with long-term vehicular travel to and from the Project site because although more vehicles would be expected to travel to and from the Project Site under the Truck Trailer Storage Lot Alternative, the one-way trip length would be reduced to 10 miles. This Alternative would thus reduce the Project's less-than-significant impacts associated with the consumption of energy resources during long-term operation, and energy consumption would not be considered wasteful as the lot is assumed to serve a local business or businesses. Neither the Project nor this Alternative would conflict with a State or local plan for renewable energy or energy efficiency, although impacts would be reduced under this Alternative in comparison to the Project because the Truck Trailer Storage Lot Alternative would result in a decrease in the use of energy resources.

***E. Geology and Soils***

Because a warehouse building would not be constructed under the Truck Trailer Storage Lot Alternative, the alternative would reduce the Project's less-than-significant impacts (after mitigation) associated with potential structural instability associated seismic-related ground failure, including liquefaction, and due to soil that is unstable or has the potential to become unstable in its existing condition. Soil stabilization would be required for the alternative, but to a lesser degree than the Project.



***F. Greenhouse Gas Emissions***

Because the Truck Trailer Storage Lot Alternative would not entail the construction of a warehouse building, this Alternative is expected to require less energy to construct and operate than the Project and, therefore, would result in a reduction of non-mobile source GHG emissions as compared to the Project. Additionally, although more vehicle trips would be generated, this Alternative would reduce mobile source GHG emissions due to a reduction in vehicle trip length. Therefore, the Truck Trailer Storage Lot Alternative would reduce the Project's less-than-significant GHG impacts (after mitigation).

***G. Noise***

Although a warehouse building would not be constructed on the Project Site, the Truck Trailer Storage Lot Alternative would result in noise and vibration generation due to construction-related activities and operational activity noise sources including truck and trailer movements and parking. The Truck Trailer Storage Lot Alternative would reduce the Project's less-than-significant impacts due to construction-related vibration because fewer construction activities would occur, but would result in approximately the same less-than-significant impacts due to operational-related noise and vibration. Thus, noise-related impacts would be reduced for construction activities and be the same or similar for operational activities under the Truck Trailer Storage Lot Alternative in comparison to the Project.

***H. Transportation***

Similar to the proposed Project, the Truck Trailer Storage Lot Alternative would not conflict with applicable programs, plans, ordinances or policies addressing the circulation system. As with the Project, impacts under this Alternative would be less than significant. The Truck Trailer Storage Lot Alternative would be required to install frontage improvements along 5th Street, 6th Street, and Sterling Avenue to General Plan standards, including roadway widening and the installation of ADA compliant sidewalks and Class II and III bike lanes.

Construction-related vehicle trip volume would be reduced under the Truck Trailer Storage Lot Alternative but operational-related trip volume would be increased. The length of truck trips would be reduced due to the origins of the trailers being from the local business community within an assumed 10-mile radius. Additionally, as only one or two employees would be expected to work in the security booths, the number of generated daily employee vehicle trips and VMT trip length would be reduced. Therefore, the Truck Trailer Storage Lot Alternative would reduce the Project's significant and unavoidable direct and cumulatively-considerable VMT impacts to less-than-significant levels.

***I. Tribal Cultural Resources***

The Truck Trailer Storage Lot Alternative would develop the entire Project Site and would result in similar potential impacts to tribal cultural resources as the Project, although depth of grading would be shallower reducing the potential for resource discovery. This Alternative would require the same mitigation as the Project and, after mitigation, both the Truck Trailer Storage Lot Alternative and the Project would result in less-than-significant potential impacts to tribal cultural resources.



#### ***J. Utilities and Service Systems***

Because a warehouse building would not be constructed, the Truck Trailer Storage Lot Alternative would have a reduced demand for utilities and services systems, including water, sewer, storm water drainage service/facilities, dry utilities, and solid waste collection and disposal, as compared to the Project. The off-site electrical line connection needed to service the warehouse for a distance of approximately 0.62 miles to the north would also be needed to service a truck trailer parking lot. Therefore, the Truck Trailer Storage Lot Alternative have the same less-than-significant impacts (after mitigation) to utilities and services systems as would the proposed Project.

#### ***K. Conclusion***

As compared to the Project, the Truck Trailer Storage Lot Alternative would result in reduced impacts under the topics of air quality, energy, geology and soils, greenhouse gas emissions, noise, and transportation. Implementation of the Truck Trailer Storage Lot Alternative would result in the same or similar impacts compared to the proposed Project under the issue areas of biological resources, cultural resources, tribal cultural resources, and utilities and service systems. The Project's VMT impact would be reduced to less than significant. The Truck Trailer Storage Lot Alternative would not result in any increased impacts to the environment in comparison to the proposed Project.

The Truck Trailer Storage Lot Alternative would meet some of the Project's objectives, although to a lesser degree. Specifically, the Truck Trailer Storage Lot Alternative would minimally expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by serving and supporting a local business or businesses, but would not bring any new economic activity to the City. The Truck Trailer Storage Lot Alternative would support a local business or businesses but would not attract new employment-generating businesses in the City of San Bernardino, thereby not further growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to commute outside the area for employment. In addition, the Truck Trailer Storage Lot Alternative would not develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property. The Truck Trailer Storage Lot Alternative would meet the objective to improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities. The Truck Trailer Storage Lot Alternative would not, however, develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that complement other existing and planned industrial developments in the local area. Lastly, the Truck Trailer Storage Lot Alternative would support a local business or businesses but would not attract new business that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.

### **6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

State CEQA Guidelines § 15126.6 requires the identification of the environmentally superior alternative. As discussed herein, implementation of the NDA would result in no physical environmental impacts beyond those that have historically occurred on the property. Because the NDA would avoid most of the Project's impacts,



it warrants consideration as the “environmentally superior alternative.” However, pursuant to State CEQA Guidelines § 15126.6(e)(2), if a no project alternative is identified as the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Accordingly, the Reduced Project Alternative, as discussed above in Subsection 6.3.2, is identified as the Environmentally Superior Alternative pursuant to State CEQA Guidelines § 15126.6, which meets a majority of the Project’s objectives, although to a lesser extent than the Project. The Reduced Project Alternative with mitigation does not reduce the Project’s VMT impact to less than significant. Accordingly, as with the Project, approval of the Reduced Project Alternative would require the City to adopt a Statement of Overriding Considerations for the significant VMT impact.



Table 6-1 Alternatives to the Project – Comparison of Environmental Impacts

Environmental Topic/Objective	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project/Does the Alternative Meet the Project Objectives?		
		No Project/No Development Alternative	Reduced Project Alternative	Truck Trailer Storage Lot Alternative
<b>Air Quality</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Biological Resources</b>	Less-than-Significant Impact	Reduced	Similar	Similar
<b>Cultural Resources</b>	Less-than-Significant Impact	Reduced	Similar	Similar
<b>Energy</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Geology and Soils</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Greenhouse Gas Emissions</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Noise</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Transportation</b>	Significant and Unavoidable Direct and Cumulatively-Considerable Impact	Reduced to Less-than-Significant Levels	Reduced, but not to Less-than-Significant Levels	Reduced to Less-than-Significant Levels
<b>Tribal Cultural Resources</b>	Less-than-Significant Impact	Reduced	Similar	Similar
<b>Utilities and Service Systems</b>	Less-than-Significant Impact	Reduced	Reduced	Reduced
<b>Objective A:</b> To expand economic development, facilitate job creation, and increase the tax base for the City of San Bernardino by establishing new industrial development near already established and planned industrial areas.	Yes	No	Yes, but less effectively	No
<b>Objective B:</b> To attract new employment-generating businesses in the City of San Bernardino, thereby growing the economy and providing a more equal jobs-housing balance in the local area that will reduce the need for members of the local workforce to	Yes	No	Yes, but less effectively	No



commute outside the area for employment.				
<b>Objective C:</b> To develop vacant or underutilized property with a use that achieves a maximized floor area ratio per regulatory allowances to take full advantage of the development potential of the property.	Yes	No	Yes, but less effectively	No
<b>Objective D:</b> To improve roadway frontage design for General Plan Circulation Element roadways as part of an implementing development project to improve streetscape landscaping, lighting, sidewalk and bike lane facilities.	Yes	No	Yes	Yes
<b>Objective E:</b> To develop a General Plan and zone-conforming industrial use that has architectural design and operational characteristics that are compatible with other existing and planned industrial developments in the local area.	Yes	No	Yes	No
<b>Objective F:</b> To attract businesses that can expedite the delivery of essential goods to consumers and businesses in the City of San Bernardino, and in the region beyond the City's boundary.	Yes	No	Yes	No



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### 7.1 PERSONS INVOLVED IN THE PREPARATION OF THIS EIR

City of San Bernardino Planning Division

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### 7.2 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

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## 7.4 DOCUMENTS APPENDED TO THIS EIR

The following reports, studies, and supporting documentation were used in preparing this EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the City of San Bernardino Planning Division at 201 North E Street, 3<sup>rd</sup> Floor, San Bernardino, CA 92401.

Appendix A: Initial Study, Notice of Preparation, and Written Comments

Appendix B: FAA No Hazard to Air Navigation

Appendix C1: Urban Crossroads (UC), 2024a. *5<sup>th</sup> & Sterling Air Quality Impact Analysis*. February 29, 2024.

Appendix C2: Urban Crossroads (UC), 2024b. *5<sup>th</sup> & Sterling Construction and Operational Health Risk Assessment*. February 29, 2024.

Appendix D: Noreas, 2023. *5<sup>th</sup> & Sterling Project, General Biological Resources Assessment*. September 2023.

Appendix E: CRM Tech (CRM), 2023. *Historical/Archaeological Resources Survey Report, Fifth and Sterling Project*. December 12, 2023.

Appendix F: Urban Crossroads (UC), 2024c. *5<sup>th</sup> and Sterling Energy Analysis*. February 29, 2024.



- Appendix G1: Southern California Geotechnical, 2024a. *Geotechnical Investigation, Proposed Industrial Building, SEC 6<sup>th</sup> Street at Sterling Avenue, San Bernardino, California*. February 16, 2024.
- Appendix G2: Southern California Geotechnical, 2024b. *Results of Infiltration Testing, Proposed Industrial Building, SEC 6<sup>th</sup> Street at Sterling Avenue, San Bernardino, California*. February 16, 2024.
- Appendix H: Urban Crossroads (UC), 2024d. *5<sup>th</sup> & Sterling, Greenhouse Gas Analysis*. February 29, 2024.
- Appendix I: Ninyo & Moore, 2023. *Phase I Environmental Site Assessment, 5<sup>th</sup> & Sterling, Highland, California*. June 23, 2023.
- Appendix J1: Kimley Horn, 2023a. *San Manuel 5<sup>th</sup> & Sterling, Preliminary Drainage Report*. June 2023.
- Appendix J2: Kimley Horn, 2023b. *Preliminary Water Quality Management Plan for San Manuel 5<sup>th</sup> & Sterling*. June 26, 2023.
- Appendix K: Urban Crossroads (UC), 2023e. *5<sup>th</sup> & Sterling Noise Impact Analysis*. June 14, 2024.
- Appendix L1: Urban Crossroads (UC), 2023f. *5<sup>th</sup> & Sterling Traffic Analysis*. October 11, 2023.
- Appendix L2: Urban Crossroads (UC), 2024g. *5<sup>th</sup> and Sterling Avenue Vehicle Miles Traveled (VMT) Analysis*. March 8, 2024.
- Appendix M: Southern California Edison (SCE), 2023. *Engineering Analysis Report*. September 14, 2023.
- Appendix N: Gregg Electric Inc. (GEI), 2023. *Site Lighting Plan*. May 26, 2023.
- Appendix O: Kimley Horn, 2024. *Sanitary Sewer Memorandum*. June 12, 2024.