Draft Environmental Impact Report
SCH No. 2019039033

Slover/Cactus Avenue Warehouse
County of San Bernardino, California

Lead Agency

County of San Bernardino
385 N. Arrowhead Avenue
San Bernardino, CA 92415

Public Review Draft | November 2019

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CEQA Consultant
T&B Planning, Inc.
17542 East 17th Street, Suite 100
Tustin, CA 92780

Project Applicant
Alere Property Group
100 Bayview Circle, Suite 310
Newport Beach, CA 92660

Lead Agency Discretionary Permits
General Plan Amendment (P201700564)
Conditional Use Permit (P201700563)

November 2019

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A: Initial Study, Notice of Preparation, and Written Comments on the NOP
B1: Air Quality Impact Analysis
B2: Health Risk Assessment
B3: Supplemental Air Quality Assessment
C: Biological Resources Assessment
D: Phase 1 Cultural Resources Assessment
E: Energy Analysis
F1: Geotechnical Report
F2: Soil Infiltration Study
G: Greenhouse Gas Emissions Analysis
H: Phase I Environmental Site Assessment (ESA)
I1: Preliminary Hydrology Report
I2: Preliminary Water Quality Management Plan
J: Noise Impact Analysis
K: Traffic Impact Analysis

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
§	Section
AA	Additional Agriculture overlay
AB	Assembly Bill
AB 32	California Climate Solutions Act of 2006
AB 52	Native Americans: California Environmental Quality Act
AB 341	Mandatory Commercial Recycling Program
AB 375	Assembly Bill 375
AB 939	California Solid Waste Integrated Management Act
AB 1327	California Solid Waste Reuse and Recycling Act
AB 1493	Pavley Fuel Efficiency Standards
AB 1989	Assembly Bill 1989
AB 2185	Assembly Bill 2185
ACBCI	Agua Caliente Band of Cahuilla Indians
ACHP	Advisory Council on Historic Preservation
ACMs	Asbestos Containing Materials
ACWM	Asbestos Containing Waste Materials
ACOE	Army Corps of Engineers
AERMOD	Air Quality Dispersion Modeling
ADT	Average Daily Traffic
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
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
AR5	5th Assessment Report
ARB	Air Resources Board
ASTs	Above ground storage tanks
BACM	Best Available Control Measure
BAU	Business as Usual
BL/RS-1-AA	Bloomington Single Residential with one-acre lots with Additional Agriculture Overlay
BMPs	Best Management Practices
BR	Biotic Resources
C_2F_6	Hexafluoroethane
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards

CalEEMod™	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards Code
Cal Pub Res. Code §42911	California Solid Waste Reuse and Recycling Act of 1991
CalRecycle	Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Code
CCR	California Code of Regulations
CCCC	California Climate Change Center
CCA	community choice aggregators
CCAA	California Clear Air Act
CD	Consistency Determination
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CFGC	California Fish and Game Code
CF_4	Tetraflouromethane
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geologic Survey
C_2H_6	Ethane
CH_4	Methane
CH_3CHF	HFC-134a
CH_3CHF_2	HFC-152a
CHF_3	HFC-23
CIWMB	California Integrated Waste Management Board
CIWMP	Countywide Integrated Waste Management Plan
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
COG	Council of Governments
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COP	Conference of the Parties
CP	Cultural Resources Preservation
CPEP	Clean Power and Electrification Pathway
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources

CRMP	Cultural Resources Monitoring Plan
CSU	California State University
CTR	California Toxics Rule
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWC	California Water Code
c.y.	Cubic Yards
dB	Decibel
dBA	A-weighted Decibels
DIF	Development Impact Fee
DOC	Department of Conservation
DOE	Determination of Eligibility
DOSH	Division of Occupational Safety and Health
DPM	Diesel Particulate Matter
DRP	Development Review Process
DSFF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substances Control
Du/ac	dwelling unit per acre
DWR	Department of Water Resources
E+P	Existing plus Project Conditions
e.g.	for example
EDR	Environmental Data Resources
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-To-Know Act
EPS	Emission Performance Standard
ESA	Environmental Site Assessment
ESA	Endangered Species Act
ESP	electric service providers
et seq.	et sequentia, meaning "and the following"
F	Fahrenheit
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FTA	Federal Transit Association
FYI	For Your Information
GCC	Global Climate Change
Gg	Gigagrams
GH	Geologic Hazard

GHG	Greenhouse Gas
GIS	Geographic Information System
GPA	General Plan Amendment
GWP	Global Warming Potential
H_2O	Water Vapor
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HMBEP	Hazardous Materials Business Emergency Plan
HMTA	Hazardous Materials Transportation Act
HMTAUSA	Hazardous Materials Transportation Uniform Safety Act
HPLV	High Pressure Low Volume
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Amendments
HWCL	Hazardous Waste Control Law
I	Interstate
I-10	Interstate 10
I-15	Interstate 15
I-215	Interstate 215
i.e.	that is
IC	Community Industrial
IEPR	Integrated Energy Policy Report
In.	inches
In/sec	inches per second
In/yr	inches per year
IOU	investor-owned utilities
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
ITPs	incidental take permits
IWMA	Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
F	Fahrenheit
JPA	Joint Powers Authority
kBTU	kilo-British thermal units
kBTU/yr	kilo-British thermal units per year
kWh	kilowatt-hour
LCA	Life-cycle analysis
LCFS	low carbon fuel standard

LEA	Lead Enforcement Agency
LESA	Land Evaluation and Site Assessment
LEV	Low-Emission Vehicle
LEV III	Low-Emission Vehicle III Regulation
Leq	equivalent continuous sound level
LOS	Level of Service
LSA	Lake and Streambed Alteration
MATES-IV	Multiple Air Toxics Exposure Study in the South Coast Air Basin
MBMI	Morongo Band of Mission Indians
MBTA	Migratory Bird Treaty Act
MEIR	maximally exposed individual receptor
MEISC	maximally exposed individual school child
MEIW	maximally exposed individual worker
MGD	million gallons per day
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMTs	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
Mph	Miles per hour
MPO	Metropolitan Planning Organization
MSL	Mean Sea Level
MT	metric ton
$MTCO_2e$	Metric Tons of Carbon Dioxide Equivalent
NAHC	Native American Heritage Commission
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NCCP	Natural Community Conservation Planning
NDC	nationally determined contributions
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
NMFS	National Marine Fisheries Service
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
N_2	Nitrogen
N_2O	Nitrous Oxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NPS	non-point source
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places

NTR	National Toxics Rule
NVIA	Noise and Vibration Impact Assessment
O_3	Ozone
ONT	LA/Ontario Airport
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Assessment
Pb	Lead
pc/mi/ln	passenger cars per mile per lane
PCBs	Polychlorinated biphenyls
PCEs	Passenger Car Equivalents
PeMS	Caltrans' Performance System Website
PFCs	Perfluorocarbons
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (2.5 microns or smaller)
PM_{10}	Fine Particulate Matter (10 microns or smaller)
POUs	public owned utilities
ppm	parts per million
PPV	peak particle velocity
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
REMEL	Reference Mean Emission Level
RMS	root mean square
ROGs	Reactive Organic Gasses
ROW	Right-of-Way
RPS	Renewable Portfolio Standards
RS-1	Single-Residential one-acre lots
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SAR	Second Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SAWPA	Santa Ana Watershed Project Authority
SB	Senate Bill
SB 18	Traditional Tribal Cultural Places Act
SB 350	Senate Bill 350
SB 375	California Senate Bill 375, Sustainable Communities and Climate Protection Act of 2008
SB 743	Senate Bill 743
SB 1078	Senate Bill 1078
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model

SCAB	South Coast Air Basin
SCAG	Sothern California Association of Governments
SCAQMD	Southern Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCH	California State Clearinghouse (Office of Planning and Research)
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SF/s.f.	square foot or square feet
SF_6	Sulfur Hexafluoride
SLF	Sacred Lands File
SGMA	Sustainable groundwater management act
SHA	Safe Harbor Agreement
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Officers
SHRC	State Historical Resources Commission
SIP	State Implementation Plan
SNUR	Significant New Use Rule
SoCalGas	Southern California Gas Company
SO_2	Sulfur Dioxide
Sq. ft.	square foot
SR	State Route
SR-18	State Route 18
SR-38	State Route 38
SR-60	State Route 60
SR-210	State Route 210
SR-330	State Route 330
SRA	Source Receptor Area
SRREs	Source Reduction and Recycling Elements
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Regional Control Board
TAC	Toxic Air Contaminants
TEA-21	Transportation Equality Act for 21st Century
TIA	Traffic Impact Analysis
TUA	Traditional Use Area
µg	microgram
$\mu g/m^3$	microgram per cubic meter
UBC	Uniform Building Code
UNFCCC	United Nations' Framework Convention on Climate Change
U.S.	United States
USEPA	United States Environmental Protection Agency
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USTs	Underground storage tanks
UWMP	Urban Water Management Plan

VOCs	Volatile Organic Compounds
WDID	Waste Discharge Identification
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WRRA	Water Reuse and Recycle Act
WVWD	West Valley Water District
Yr	year
ZEV	Zero-Emission Vehicle
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 makes a decision 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), having California State Clearinghouse (SCH) No. 2019039033, was prepared in accordance with CEQA Guidelines Article 9, §§ 15120-15132 to evaluate the potential environmental impacts associated with planning, constructing, and operating the proposed Slover/Cactus Avenue Warehouse Project (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 that the Project may cause to the physical environment. The Draft EIR will be available for public review for a minimum period of 45 days. After consideration of public comment, the County of San Bernardino will consider certifying the Final EIR and adopting required findings.

This Executive Summary complies with CEQA Guidelines Section 15123, "Summary." This EIR includes a description of the proposed Project and evaluates the physical environmental effects that could result from Project implementation. The County of San Bernardino determined that the scope of this EIR should cover 14 subject areas. The scope was determined through the completion of an Initial Study accepted by the County of San Bernardino's independent judgment pursuant to CEQA Guidelines Section 15063, and in consideration of public comment received by the County in response to this EIR's Notice of Preparation (NOP). The Initial Study, NOP, and written comments received by the County in response to the NOP, are attached to this EIR as *Technical Appendix A*. As determined by the Initial Study and in consideration of public comment on the NOP, the 14 environmental subject areas that could be reasonably and significantly affected by planning, constructing, and/or operating the proposed Project are analyzed herein, including:

1. Aesthetics
2. Air Quality
3. Biological Resources
4. Cultural Resources
5. Energy
6. Geology and Soils
7. Greenhouse Gas Emissions
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Noise
12. Transportation
13. Tribal Cultural Resources
14. 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 filed with the California State Clearinghouse (March 6, 2019); 2) discloses 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 the proposed Project may cause. A summary of the proposed Project's significant environmental impacts and the mitigation measures imposed by the County of San Bernardino on the Project to lessen or avoid those impacts is included in this Executive Summary as Table S-1, *Mitigation Monitoring and Reporting Program*. The County 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 County of San Bernardino to monitor and enforce, 3) are legal for the County 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 LOCATION AND SETTING

For purposes of analysis in this EIR, the "Project site" consists of approximately 13.3 acres located within the unincorporated community of Bloomington, which is located in the southwest portion of San Bernardino County, California. The Bloomington community is located north of the City of Jurupa Valley, east of the City of Fontana, and south and west of the City of Rialto. The Project site is located approximately 0.3-mile south of Interstate 10 (I-10), between the Cedar Avenue and Riverside Avenue off-ramps. The site's location in the regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

At the local scale, the Project site is located at the southwest corner of the intersection of Slover Avenue and Cactus Avenue as illustrated on Figure 3-2, *Vicinity Map*, and Figure 3-3, *USGS Topographic Map*, in Section 3.0 of this EIR

S.2.2 PROJECT SUMMARY

For purposes of this EIR, the term "Project" refers to the discretionary actions required to implement the proposed Slover/Cactus Avenue Warehouse Project and all of the activities associated with its implementation (including planning, construction, and ongoing operation). The Project would entail the construction and operation of a warehouse facility and, also, includes associated site improvements, including drive aisles, landscaping, utility infrastructure, water quality basins, exterior lighting, and signage. The principal discretionary actions requested by the Project Applicant to implement the proposed Project include a General Plan Amendment (P201700564) and a Conditional Use Permit (P201700563). The Project also would include the vacation and abandonment of Walnut Avenue between Otilla Street and Slover Avenue. Refer to EIR Section 3.0, *Project Description*, for a detailed description of the proposed Project.

S.2.3 PROJECT OBJECTIVES

The fundamental goal of the Project is to accomplish the orderly development of an industrial warehouse facility on the Project site. The Project would achieve this goal through the following objectives.

1. To develop a vacant or underutilized property with an industrial building to help meet the substantial and unmet regional demands for this type of building space.
2. To expand economic development and facilitate job creation in the County of San Bernardino by establishing new industrial development adjacent to or near already-established industrial uses.
3. To attract new businesses to the County of San Bernardino and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.
4. To develop Class A industrial buildings in the County of San Bernardino that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar buildings in the local area and region.
5. To develop a property that has access to available infrastructure, including roads and utilities.
6. To develop an industrial building with loading bays in close proximity to the I-10 Freeway that can be used as part of the southern California goods movement network.
7. To develop light industrial uses in close proximity to designated truck routes and the State highway system to avoid or shorten truck-trip lengths on other roadways.

S.3 EIR PROCESS

An Initial Study was prepared by the County 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 *Technical Appendix A* for a copy of the Initial Study). For this Project, the Initial Study indicated that this EIR should focus in detail on 14 environmental subject areas listed above in Subsection S.1. After completion of the Initial Study, the County filed a NOP with the California Office of Planning and Research (State Clearinghouse) to indicate that an EIR would be prepared. The Initial Study and NOP were distributed for a 30-day public review period, which began on March 6, 2019. The County of San Bernardino received written comments on the scope of the EIR during those 30 days, which were considered by the County during the preparation of this EIR. The County also held an EIR scoping meeting open to the interested public agencies and members of the general public on March 21, 2019.

This EIR is being 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, 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 County 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 San Bernardino County Board of Supervisors. Certification of the Final EIR would be accompanied by the adoption of written findings and a statement of overriding considerations for any significant unavoidable environmental impacts identified in the Final EIR. In addition, the County 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 § 15123(b)(2) requires the Lead Agency (County 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, noise, and transportation.

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

S.5 Alternatives to the Proposed Project

In compliance with CEQA Guidelines § 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 Development Alternative

The No Development Alternative considers no development on the Project site beyond what occurs on the site under existing conditions (as described in EIR Section 2.0). As such, the four (4) single-family residences and associated residential outbuildings on the Project site would remain on the site into the foreseeable future. Under this alternative, no new improvements would be made to the

Project site. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the property in its existing state.

Implementation of the No Development Alternative would result in no physical environmental impacts beyond those that have historically occurred on the property. All significant effects of the proposed Project would be avoided by the selection of this alternative. The No Development Alternative would fail to meet all of the Project's objectives.

S.5.2 No Project Alternative

The No Project Alternative would re-develop the Project site with 13 detached single-family homes on approximately 1-acre lots. The No Project Alternative would be consistent with the Project site's "Single Residential (RS-1)" land use designation from the County of San Bernardino General Plan, which allows single-family residential development on the Project site at a maximum density of 1.0 dwelling units per acre. This alternative would not require a General Plan Amendment (which is required for the Project).

The No Project Alternative would avoid the Project's cumulatively considerable impacts to transportation; but, would result in the same significant construction air quality impact as the Project. The No Project Alternative also would reduce the Project's less-than-significant impacts to aesthetics, air quality (construction), energy, greenhouse gas emissions, hazards and hazardous materials, land use and planning, noise, and utilities and service systems. The No Project Alternative would fail to meet all but one of the Project's objectives.

S.5.3 Trailer Parking Alternative

The Trailer Parking Alternative considers a proposal where the western portion of the Project site (approximately 8 acres) would be re-developed with an approximately 150,000 s.f. warehouse building and the remainder of the Project site (approximately 5 acres abutting the Slover Avenue and Cactus Avenue intersection) would be developed with a truck trailer parking lot. The truck trailer lot provided under this alternative would include approximately 135 trailer parking spaces. This alternative was selected by the Lead Agency to evaluate a scenario that would reduce the total building area on the Project site relative to the proposed Project but still allow productive industrial use of the entire site.

The Trailer Parking Alternative would avoid the Project's cumulatively considerable transportation impact at two (2) intersections and would reduce the severity of the Project's impacts at all other Study Area intersections. As compared to the Project, this alternative is expected to increase mobile source air pollutant emissions, including increasing carcinogenic and non-carcinogenic health risk hazards from diesel emissions, and, also, would result in a significant greenhouse gas emissions impact that would not occur under the Project. The Trailer Parking Alternative would slightly reduce the Project's less-than-significant impacts to energy and utilities and service systems; impacts to all other environmental topic areas would be similar to the Project. This alternative is identified as the environmentally superior alternative. The Trailer Parking Alternative would meet all Project

objectives; but, would achieve five (5) of the Project's seven (7) objectives less effectively than the Project.

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

S.6.1 EFFECTS FOUND NOT TO BE SIGNIFICANT

This EIR includes a detailed analysis of the 14 subject areas identified in the Initial Study prepared under the supervision of the County of San Bernardino pursuant to CEQA Guidelines § 15063 and CEQA Statute Section 21002(e), as well as consideration of public comments received by the County on this EIR's NOP and during the EIR scoping meeting. 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 County concluded that impacts clearly would be less than significant and that do not warrant detailed analysis in this EIR include: Agriculture and Forestry Resources, Mineral Resources, Population/Housing, Public Services, Recreation, and Wildfire. This EIR addresses these six (6) topics in EIR Subsection 5.0, *Other CEQA Considerations*.

S.6.2 IMPACTS OF THE PROPOSED PROJECT

Table S-1 provides a summary of the proposed Project's environmental impacts, as required by CEQA Guidelines § 15123(a). Also presented are the mitigation measures recommended by the County of San Bernardino to further avoid adverse environmental impacts or to reduce their level of significance. After the application of all feasible mitigation measures, the Project would result in one (1) significant and unavoidable environmental effect, as summarized below.

- Transportation: Project traffic would contribute to LOS deficiencies at six (6) Study Area intersections Opening Year (2020) and Horizon Year (2040) traffic conditions where the County of San Bernardino cannot assure that needed improvements would be in place at the time of need.

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.1 Aesthetics					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. The Project site does not comprise all or part of a scenic vista and does not contain any visually prominent scenic features. No unique views to scenic vistas are visible from the property. The Project would not substantially change a scenic view or substantially block or obscure a scenic vista.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: No Impact. The Project site is not located within the viewshed of a scenic highway and, therefore, the Project site does not contain any scenic resources visible from a scenic highway.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: No Impact. The Project would not conflict with applicable design regulations contained in the San Bernardino County Development Code.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: Less-than-Significant Impact. Compliance with County of San Bernardino Development Code requirements for artificial lighting would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.2 Air Quality					
Summary of Impacts					
Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project would violate the NAAQS and/or CAAQS during the short-term site preparation phase of Project construction, which would conflict with the SCAQMD's *2016 AQMP*.	**MM 4.2-1** Prior to grading permit issuance, the County of San Bernardino shall verify that a note is included on grading plans that requires all construction equipment used on the Project site during the site preparation phase and that exceeds 150 horsepower to be California Air Resources Board (CARB) Tier 3 equivalent or better. The Project contractor(s) shall be required to comply with this note and allow	County of San Bernardino; Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance.				
	MM 4.2-2 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County of San Bernardino shall verify that the following notes are specified on the grading plan. The Project construction contractor(s) shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance. a) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. b) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed	County of San Bernardino; Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads. c) Gravel pads must be installed at all access points to prevent tracking of mud onto public roads. d) Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (e.g., install wheel shakers, wheel washers, limit site access). e) When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. f) All street frontages adjacent to the construction site shall be swept at least once a day using SCAQMD Rule 1186 certified street sweepers utilizing reclaimed water trucks if visible soil materials are carried to adjacent streets. g) Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and initiate corrective action to legitimate complaints within 24 hours. h) Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil. i) Any on-site stock piles of debris, dirt, or other dusty material shall be covered or watered				

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	as necessary to minimize fugitive dust pursuant to SCAQMD Rule 403. j) A high wind response plan shall be formulated and implemented for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.				
	MM 4.2-3 Prior to building permit issuance, the County of San Bernardino shall verify that a note is provided on all building plans specifying that compliance with SCAQMD Rule 1113 is mandatory during application of all architectural coatings. Project contractors shall be required to comply with the note and maintain written records of such compliance that can be inspected by the County of San Bernardino upon request. This note also shall indicate that only "low-volatile organic compound" paint products (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used. All other architectural coatings shall comply with the VOC limits prescribed by SCAQMD Rule 1113.	County of San Bernardino; Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to building permit issuance	
	MM 4.2-4 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged. Prior to the issuance of an occupancy permit, the County of San Bernardino shall conduct a site inspection to ensure that the signs are in place.	County of San Bernardino; Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	MM 4.2-5 All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be electric-powered or powered by non-combustion engines. This requirement shall be noted in the buildings' sale and lease agreements and also shall be noted on all tenant improvement plans submitted to the County of San Bernardino.	County of San Bernardino; Project Construction Contractors	County of San Bernardino Land Use Services Department		
Thresholds b: Less-than-Significant Impact. The Project's regional criteria pollution emissions during construction and operation would not exceed the applicable SCAQMD thresholds and would not contribute to an existing or projected air quality violation, on a direct or cumulatively-considerable basis.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Significant Direct and Cumulatively-Considerable Impact. The Project would exceed the applicable SCAQMD localized thresholds for $PM_{2.5}$ emissions during the Site Preparation stage of construction, which would result in a significant direct and cumulatively-considerable impact.	Refer to MM 4.2-1 through MM 4.2-5, above.				Less-than-Significant Impact with Mitigation Incorporated
Threshold d: Less-than-Significant Impact. The Project would not produce air emissions that would lead to unusual or substantial construction-related odors. Odors associated with long-term operation of the Project would be minimal and less than significant. The Project is required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.3 Biological Resources					
Summary of Impacts					
Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project site contains habitat that is suitable for the burrowing owl and there is the potential that the burrowing owl could migrate onto the property before Project construction commences; in this event, impacts to the burrowing owl would be significant on a direct and cumulatively-considerable basis. The Project would have no substantial impact, either directly or through habitat modifications, on any other candidate, sensitive, or special-status plant or wildlife species.	**MM 4.3-1** Within 30 days prior to grading, a qualified biologist shall conduct a survey of suitable habitat on site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the County of San Bernardino prior to the issuance of a grading permit and subject to the following provisions: a) In the event that the pre-construction survey identifies no burrowing owls on the property a grading permit may be issued without restriction. b) In the event that the pre-construction survey identifies the presence of the burrowing owl on the Project site, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.	Project Biologist	County of San Bernardino Land Use Services Department	Within 30 days prior to grading	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold b: No Impact. The Project impact area does not contain riparian and/or other sensitive natural habitats; therefore, the Project would have no impact on riparian or other sensitive habitats as classified by the CDFW or USFWS.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold c: No Impact. No State- or federally-protected wetlands are located within the Project impact area; therefore, no impact to wetlands would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
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.	**MM 4.3-2** Vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (January 1 through September 1), unless a migratory bird nesting survey is completed in accordance with the following requirements: a) A migratory bird nesting survey of the Project site, including suitable habitat within a 500-foot radius, shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing or ground disturbance. b) A copy of the migratory nesting bird survey results report shall be provided to the County of San Bernardino. If the survey identifies the presence of active nests, then the qualified biologist shall provide the County with a copy of maps showing the location of all nests and a species-appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the County and shall be no less than a 100-foot radius around the nest for non-raptors and no more than a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with	Project Biologist	County of San Bernardino Land Use Services Department	Within three (3) days prior to initiating vegetation clearing or ground disturbance	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist with County concurrence verify that the nests are no longer occupied and juvenile birds can survive independently from the nests.				
Threshold e: No Impact. The Project would not conflict with any local policies or ordinances protecting biological resources.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold f: No Impact. The Project impact area is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, no impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact
4.4 Cultural Resources					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. One (1) historic assemblage site is present on the Project site; however, the site is not not considered a significant historical resource. The Project would remove the assemblage, which is not a historical resource pursuant to § 15064.5.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Significant Direct and Cumulatively-Considerable Impact. No known prehistoric resources are present on the Project site and the likelihood of uncovering buried prehistoric resources on the Project site is moderate to low due to the magnitude of historic ground disturbance on the Project site (resulting from citrus grove production). Nonetheless, the potential exists for Project-related construction activities to result in a direct and cumulatively-considerable impact to significant subsurface prehistoric archaeological	**MM 4.4-1** Prior to the issuance of a grading permit, the Project Applicant/Developer or Project Archaeologist shall provide evidence to the County of San Bernardino that a Cultural Resources Monitoring Plan (CRMP) has been developed to guide the procedures and protocols of an archaeological monitoring program to be implemented during Project construction. The CRMP shall outline the identification and treatment procedures that must be followed if archaeological resources are discovered that meet the definition of a significant cultural resource pursuant to CEQA Guidelines § 15064.5. Such procedures may include, but not be limited to	Project Applicant/Developer; Project Archaeologist	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
resources should such resources to be discovered during Project-related construction activities.	data collection, recordation, and curation.				
	MM 4.4-2 Prior to the issuance of a grading permit, the Project Applicant/Developer shall provide evidence to the County of San Bernardino that a qualified archaeologist (herein, "Project Archaeologist") with at least 3 years of regional experience in archaeology has been retained to conduct prehistoric archaeological monitoring during earthmoving activities on-site and excavation activities within the Project site. The Project Archaeologist shall be present on-site to monitor all ground-disturbing activities until the Project Archaeologist determines that the archaeological sensitivity of the Project's disturbance area has been reduced to low (e.g., due to soil composition, level of disturbance). Should the Project Archaeologist determine that there are no archaeological resources within the Project's disturbance area or should the archaeological sensitivity be reduced to low during construction activities, archaeological monitoring activities shall cease. If resources are discovered, the procedures outlined in the CRMP shall be followed.	Project Applicant/Developer; Project Archaeologist	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	
	MM 4.4-3 Prior to the issuance of a Certificate of Occupancy, the Project Archaeologist shall submit a report to the County of San Bernardino and the South Central Coast Information Center that summarizes the results of the prehistoric and historic archaeological monitoring conducted during Project construction. The final report shall itemize any archaeological resources recovered, with maps to accurately record the original location of recovered resources, and provide evidence that the resources were donated to and accepted for curation by the San	Project Archaeologist	County of San Bernardino Land Use Services Department	Prior to the issuance of a Certificate of Occupancy	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Bernardino County Museum or other accredited repository.				
Threshold c: Less-than-Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 *et seq.* Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.5 Energy					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. The amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Less-than-Significant Impact. The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California identified in State and local plans for renewable energy and energy efficiency.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.6 Geology and Soils					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. Implementation of the Project would not expose people or structures to substantial direct or indirect adverse effects related to liquefaction or fault rupture. The Project site is subject to seismic ground shaking associated with earthquakes; however, mandatory compliance with local and State regulatory requirements and building codes would ensure that the Project minimizes potential hazards related to seismic ground shaking to less-than-significant levels.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact.
Threshold b: Less-than-Significant Impact. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP), SCAQMD Rule 403, and San Bernardino Municipal Code § 85.11.030 to minimize water and wind erosion. Following completion of development, the Project's owner or operator would be required by law to implement a WQMP during operation, which would preclude substantial long-term erosion impacts.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact.
Threshold c: Less-than-Significant Impact. There is no potential for the Project's construction or operation to cause on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific geotechnical report during Project construction.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact.

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
Threshold d: No Impact. The Project site contains soils with very low susceptibility to expansion; therefore, the Project would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. No impact would occur.	No mitigation is required.	N/A	N/A	N/A	No Impact.
Threshold e: No Impact. No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.	No mitigation is required.	N/A	N/A	N/A	No Impact.
Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project would not impact any known paleontological resource or unique geological feature. However, the Project site contains alluvium soils that may contain important paleontological resources. Accordingly, construction activities on the Project site have the potential to unearth and adversely impact paleontological resource that may be buried beneath the ground surface.	**MM 4.6-1** Prior to the issuance of a grading permit, the Project Applicant or construction contractor shall provide evidence to the County of San Bernardino that the construction site supervisors and crew members involved with grading and trenching operations are trained to recognize paleontological resources (fossils) should such resources be unearthed during ground-disturbing construction activities. If a suspected paleontological resource is identified, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations in a 100-foot radius around the find and seek identification and evaluation of the suspected resource by a qualified paleontologist meeting the definition of a qualified vertebrate paleontologist. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note. The significance of the discovered resources shall be determined by the qualified paleontologist. If the resource is determined to be significant, Mitigation Measure 4.6-2 shall apply.	Project Applicant; Project Construction Contractors; Project Paleontologist	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	MM 4.6-2 If a significant paleontological resource is discovered on the property, discovered fossils or samples of such fossils shall be collected and identified by a qualified vertebrate paleontologist. Significant specimens recovered shall be properly recorded, treated, and donated to the San Bernardino County Museum, Division of Geological Sciences, or other repository with permanent retrievable paleontologic storage. A final report shall be prepared and submitted to the County of San Bernardino that itemizes any fossils recovered, with maps to accurately record the original location of recovered resources, and contains evidence that the resources were donated to and accepted for curation by the San Bernardino County Museum or other repository.	Project Paleontologist	County of San Bernardino Land Use Services Department	If a significant paleontological resource is discovered on the property	
4.7 Greenhouse Gas Emissions					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. The Project is calculated to generate approximately 2,958.27 MTCO2e annually, which would not exceed the County's screening threshold of 3,000 MTCO2e. As such, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Less-than-Significant Impact. The Project would be consistent with applicable regulations, policies, plans, and policy goals that would further reduce GHG emissions.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.8 Hazards and Hazardous Materials					
Summary of Impacts					
Threshold a and b: Less-than-Significant Impact. During Project construction and operation, mandatory compliance to	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
federal, State, and local regulations would ensure that the proposed Project would not create a significant hazard to the environment due to routine transport, use, disposal, or upset of hazardous materials.					
Threshold c: No Impact. The 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.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites complied pursuant to Government Code § 65962.5.	No mitigation is required.	N/A	N/A	N/A	No Impact
Threshold e: Less-than-Significant Impact. The Project site is located within a portion of the ONT AIA that does not impose any land use or design restrictions. As such, the Project would not result in an airport safety hazard for people residing or working in the Project area.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold f: Less-than-Significant Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold g: No Impact. The Project site is not located in close proximity to wildlands or areas with high fire hazards. Thus, the Project would not expose people or structures to a significant wildfire risk.	No mitigation is required.	N/A	N/A	N/A	No Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
4.9 Hydrology and Water Quality					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. The Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively-considerable basis. Compliance with a SWPPP and WQMP is required to address construction-related water quality issues.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold b: Less-than-Significant Impact. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Less-than-Significant Impact. The Project would retain the site's general drainage pattern and is required to incorporate design features to minimize erosion and sediment within surface water runoff. The Project would not create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems, nor would development of the Project provide substantial additional sources of polluted runoff. The Project also would not construct structures within a 100-year flood hazard area that would impede or redirect flood flows.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: No Impact. The Project would not be subject to seiches, tsunamis, or flood hazards; therefore, risk release of pollutants due to Project inundation would not occur.	No mitigation is required.	N/A	N/A	N/A	No Impact.
Threshold e: Less-than-Significant Impact. The Project would not conflict with or obstruct implementation of a water quality	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
control plan or sustainable groundwater management plan.					
4.10 Land Use and Planning					
Summary of Impacts					
Threshold a: No Impact. The proposed Project would not physically divide an established community.	No mitigation is required.	N/A	N/A	N/A	No Impact.
Threshold b: Less than Significant Impact. The Project's proposed General Plan Amendment would eliminate inconsistencies between the land use proposed for the Project site and the site's existing General Plan land use designation. The Project would not result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this EIR.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
4.11 Noise					
Summary of Impacts					
Threshold a: Significant Direct Impact. The Project would expose noise-sensitive receptors along the southern Project site boundary (i.e., Receivers R3 and R4) to excessive construction noise. In addition, potential nighttime operational activities on the Project site would expose noise-sensitive receptors that abut the northwest corner of the Project site to excessive noise levels.	**MM 4.11-1** A 12-foot-tall temporary noise barrier shall be installed along the southern Project site boundary for the duration of Project construction. The temporary noise barrier shall have a solid face from top to bottom and shall meet the following minimum standards: a) The temporary noise barrier shall provide a minimum transmission loss of 20 dBA (Federal Highway Administration, Noise Barrier Design Handbook). The noise barrier shall be constructed using an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to a construction site perimeter fence or equivalent temporary fence posts or barrier materials; b) The noise barrier must be maintained, and	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and c) The noise control barrier and associated elements shall be completely removed upon the conclusion of the construction activity.				
	MM 4.11-2 Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer's standards.	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	
	MM 4.11-3 Construction contractors shall place all stationary construction equipment so that all emitted noise is generated toward the center of the site and away from the noise sensitive receivers nearest the Project site.	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	
	MM 4.11-4 Construction contractors shall locate equipment staging areas on the Project site in locations that will create the greatest feasible distance between construction related noise sources and noise sensitive receivers nearest the Project site.	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	
	MM 4.11-5 Construction contractors shall ensure that delivery trucks use designated truck route(s).	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	
	MM 4.11-6 A minimum eight (8)-foot-tall noise barrier shall be constructed along the portion of the Project site's northwest boundary that abuts property with occupied residences. The location and maximum extent of the construction noise barrier is illustrated on Exhibit ES-A from the report titled "Slover and Cactus Warehouse Noise Impact Analysis," prepared by Urban	Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to grading permit issuance	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	Crossroads and dated May 17, 2019. The noise barrier shall meet be constructed of masonry block, an earthen berm, or any combination of construction materials capable of achieving a minimum weight of four (4) pounds per square foot and a minimum transmission loss of 20 dBA.				
Threshold b: Less-than-Significant Impact. The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: No Impact. The Project site is not located within two miles of a public airport or within an airport land use plan, nor is the Project site located within the vicinity of a private airstrip.	No mitigation is required.	N/A	N/A	N/A	No Impact.
4.12 Transportation					
Summary of Impacts					
Threshold a: Cumulatively-Considerable Impact. The addition of Project-related traffic would contribute to LOS deficiencies at Study Area intersections in the Opening Year and Horizon Year traffic conditions.	**MM 4.12-1** Prior to the issuance of building permits, the Project Applicant/Developer shall comply with the applicable requirements of County of San Bernardino Development Impact Fee Preserve (DIF) program, which requires fee payment to the County of San Bernardino (less any fee credits), a portion of which is used by the County to fund the installation of road and intersection improvements to reduce traffic congestion.	Project Applicant/Developer	County of San Bernardino Land Use Services Department	Prior to the issuance of building permits	Significant and Unavoidable Impact
	MM 4.12-2 Prior to the issuance of an occupancy permit, the Project Applicant/Developer shall make a fair-share payment to the County of San Bernardino, to be held in trust, for the construction of the improvements at the intersections listed below. The County of San Bernardino shall only use the funds for the construction of the improvements listed in Table 1-5 of the "Slover and Cactus Warehouse Traffic Impact Analysis," prepared	Project Applicant/Developer	County of San Bernardino Land Use Services Department	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	by Urban Crossroads (dated April 12, 2019). The Project's fair-share obligations are listed in Table 1-6 of the same report. If within five years of the date of collection of the Project's fair-share fee payment, the County of San Bernardino has not completed the improvements or established a fair-share funding program for the specified improvements, then the County of San Bernardino shall return the funds to the Project Applicant/Developer. a) Cedar Avenue and I-10 Westbound ramps; b) Cedar Avenue and I-10 Eastbound ramps; c) Cedar Avenue and Slover Avenue; and d) Cactus Avenue and Slover Avenue. **MM 4.12-3** Prior to the issuance of an occupancy permit, the Project Applicant/Developer shall make a fair-share payment to the County of San Bernardino, to be held in trust for conveyance to the City of Rialto and/or Caltrans, for the construction of the improvements at the intersections listed below. The City or Rialto and/or Caltrans shall only use the funds for the construction of the improvements listed in Table 1-5 of the "Slover and Cactus Warehouse Traffic Impact Analysis," prepared by Urban Crossroads (dated April 12, 2019). The Project's fair-share obligations are listed in Table 1-6 of the same report. If within five years of the date of collection of the Project's fair-share fee payment, the City of Rialto and/or Caltrans has not established a fair-share funding program for the specified improvements that the County of San Bernardino is able to make contributions to, then the County of San Bernardino shall return the funds to the Project Applicant/Developer. a) Riverside Avenue and I-10 Eastbound	Project Applicant/Developer	County of San Bernardino Land Use Services Department	Prior to the issuance of an occupancy permit	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	ramps; and b) Riverside Avenue and Slover Avenue.				
Threshold b: No Impact. Pursuant to CEQA Guidelines Section 15064.3(c), the County has until July 1, 2020, to implement CEQA Guidelines Section 15064.3(b). At the time of writing this EIR, the County of San Bernardino had not implemented CEQA Guidelines Section 15064.3(b).	No mitigation is required.	N/A	N/A	N/A	No Impact.
Threshold c: Less-than-Significant Impact. No significant transportation safety hazards would be introduced as a result of the proposed Project.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: No Impact. Adequate emergency access would be provided to the Project site during construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.	No mitigation is required.	N/A	N/A	N/A	No Impact.
4.13 Tribal Cultural Resources					
Summary of Impacts					
Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project site does not contain any recorded Native American cultural resources; therefore, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources. Nonetheless, construction activities on the Project site have the potential, however unlikely, to unearth and adversely impact tribal cultural resources that may be buried beneath the ground surface.	**MM 4.13-1** Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the County of San Bernardino that a professional archaeologist (hereafter "Project Archaeologist") has been retained to conduct monitoring of all mass grading activities. The Project Archaeologist shall have the authority to redirect earthmoving activities in the event that suspected tribal cultural resources are unearthed during Project construction.	Project Applicant; County of San Bernardino; Project Archaeologist	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	Less-than-Significant Impact with Mitigation Incorporated

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	MM 4.13-2 Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the County of San Bernardino that the Native American Tribe(s) that requested consultation with the County during the SB 18 and AB 52 processes (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days' advance notice of all mass grading and trenching activities. The Native American Tribal Representatives also shall be notified of and allowed to attend the pre-grading meeting with the County and Project construction contractors and/or monitor all Project mass grading and trenching activities. In the event that suspected tribal cultural resources are unearthed, the Native American Tribal Representatives shall have the authority to redirect earth moving activities in the affected area.	Project Applicant; County of San Bernardino; Native American Tribal Representative; Project Construction Contractors	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	
	MM 4.13-3 Prior to the issuance of a grading permit, the Project Applicant or construction contractor shall provide evidence to the County of San Bernardino that the construction site supervisors and crew members involved with grading and trenching operations have received training by the Project Archaeologist to recognize archaeological and tribal cultural resources should such resources be unearthed during ground-disturbing construction activities. Any Native American Tribal Representatives shall be allowed to attend the training session. The training will include a brief review of the cultural sensitivity of the Project site and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are	Project Applicant; County of San Bernardino; Project Construction Contractors; Project Archaeologist; Native American Tribal Representative	County of San Bernardino Land Use Services Department	Prior to the issuance of a grading permit	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel involved with grading and trenching operations that begin work on the Project site following the initial training session must take the training prior to beginning work on the Project site and the Project archaeologist and monitoring Native American Tribe(s) shall make themselves available to provide the training on an as-needed basis.				
	MM 4.13-4 If a suspected significant tribal cultural resource is identified on the property, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations in a 100-foot radius around the find and seek identification and evaluation of the suspected resource by the Project Archaeologist and the Native American Tribal Representative. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section § 15064.5 and Section 21083.2. If the resource is significant, Mitigation Measure MM 4.13-5 shall apply.	Project Construction Contractors; Project Archaeologist; County of San Bernardino; Native American Tribal Representative	County of San Bernardino Land Use Services Department	If a suspected significant tribal cultural resource is identified on the property	
	MM 4.13-5 If a significant tribal cultural resource is discovered on the property, ground disturbing activities shall be suspended 50 feet around the resource until a treatment plan is implemented. A treatment plan shall be prepared and implemented, subject to approval by the County of San Bernardino, to protect the	County of San Bernardino; Native American Tribal Representative; Project Construction Contractors	County of San Bernardino Land Use Services Department	If a significant tribal cultural resource is discovered on the property	

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
	identified resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological or tribal cultural resource(s) in accordance with current professional archaeology standards. The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery and shall require that all recovered artifacts undergo basic field analysis and documentation or laboratory analysis, whichever is appropriate. At the completion of the basic field analysis and documentation or laboratory analysis, any recovered resource(s) shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the County of San Bernardino. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the County of San Bernardino, the South Central Coastal Information Center (SCCIC) at California State University (CSU), Fullerton, and the appropriate Native American Tribe(s).				
4.14 Utilities and Service Systems					
Summary of Impacts					
Threshold a: Less-than-Significant Impact. The Project's construction of new or expanded water, wastewater treatment or storm water drainage, electric power,	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

Table S-1 Mitigation Monitoring and Reporting Program

THRESHOLD	MITIGATION MEASURES (MM)	RESPONSIBLE PARTY	MONITORING PARTY	IMPLEMENTATION STAGE	LEVEL OF SIGNIFICANCE
natural gas, or telecommunications facilities, would not cause significant environmental effects.					
Threshold b: Less-than-Significant Impact. The WVWD is expected to have sufficient water supplies to service the Project. The Project would not exceed the WVWD's available supply of water during normal years, single-dry years, or multiple-dry years.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold c: Less-than-Significant Impact. The City of Rialto would provide wastewater treatment services to the Project site via the Rialto Wastewater Treatment Plan. This facility has adequate capacity to service the Project.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold d: Less-than-Significant Impact. There is adequate capacity available at the Mid-Valley and San Timoteo Landfills to accept the Project's solid waste during both construction and long-term operation. 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.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact
Threshold e: Less-then-Significant Impact. The Project would comply with federal, State, and local management and reduction statues and regulations related to solid waste.	No mitigation is required.	N/A	N/A	N/A	Less-than-Significant Impact

1.0 INTRODUCTION

This Environmental Impact Report (EIR) is an informational document that represents the independent judgment of the County of San Bernardino, acting as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), and evaluates the physical environmental effects that could result from constructing and operating the proposed Slover/Cactus Avenue Warehouse project (hereafter, the "Project").

Hereafter 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 Slover/Cactus Avenue Warehouse, including all discretionary and administrative approvals and permits required for its implementation. When the term "Project Applicant" is used with the initial letters capitalized, the term shall mean Alere Property Group, LLC, which is the entity that submitted applications to the County of San Bernardino to entitle the Project site as proposed and as evaluated in this EIR.

1.1 PURPOSES OF CEQA AND THIS EIR

As stated by CEQA Guidelines § 15002, the basic purposes of CEQA are to:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities involving discretionary government approvals (including the approval of private development projects);
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose (if the project involves significant environmental effects).

As a first step in the CEQA compliance process, an Initial Study was prepared under the supervision of the County of San Bernardino pursuant to CEQA Guidelines § 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 CEQA Guidelines § 15161, would be required. Accordingly, this document serves as a Project EIR.

As required by CEQA Guidelines § 15161, this Project EIR will "…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." Furthermore, in conformance with CEQA Guidelines § 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 EVALUATED BY THIS EIR

The Project Applicant proposes to develop a 257,855-square foot (sq. ft.) warehouse facility on an approximately 13.3-acre property located at the southwest corner of the Slover Avenue and Cactus Avenue intersection in the unincorporated community of Bloomington, San Bernardino County, California. The warehouse facility also would include associated improvements such as truck and passenger vehicle parking areas, fences, gates, hardscape areas, and ornamental landscaping.

The Project Applicant has filed applications for the following discretionary actions, which are under consideration by the County of San Bernardino:

- **General Plan Amendment (P201700564)** would amend the County of San Bernardino General Plan Land Use Map by changing the land use designation for the Project site from Single Residential (RS-1) with Additional Agriculture Overlay (BL/RS-1-AA) to Community Industrial (IC). According to the County's General Plan, the Community Industrial (IC) designation provides for light industrial uses such as wholesale/warehouse services.
- **Conditional Use Permit (P201700563)** provides for the development and operation of a 257,855- sq. ft. warehouse facility on the subject property. The proposed building would contain 247,855 square feet (s.f.) of warehouse floor area and 10,000 s.f. of office space. Vehicular access to the Project site would be provided by two (2) driveways along Slover Avenue and two (2) driveways along Cactus Avenue. Automobile parking would be provided on the northeast, east, and west sides of the building; loading docks and truck parking areas would be located on the north side of the building. The Project also would include numerous site improvements, such as a storm water detention basin, ornamental landscaping, and utility infrastructure.

A **Roadway Vacation/Abandonment** also would be required to implement the Project, as described in EIR Section 3.0, *Project Description*.

1.3 PRIOR CEQA REVIEW

The Project site is located within the geographical limits of the County of San Bernardino and is covered by the County's General Plan. The General Plan was approved by the County of San Bernardino in 2007 and provides the fundamental basis for the County's land use and development policies. The County's General Plan was the subject of a previous environmental review under CEQA; a Program EIR for the County's General Plan was certified by the County of San Bernardino in 2007 (State Clearinghouse Number 2005101038). The Program EIR contains information relevant to the Project site. Accordingly, the Program EIR for the County's General Plan is herein incorporated by

reference pursuant to CEQA Guidelines § 15150 and is available for public review at the County of San Bernardino, Land Use Services, Planning Division, 385 North Arrowhead Avenue, San Bernardino, California 92415.

1.4 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 CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.).

Pursuant to CEQA § 21067 and CEQA Guidelines Article 4 and § 15367, the County 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 on any approvals for the Project, the County of San Bernardino has the obligations 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 County of San Bernardino'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 proposed Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§ 15090 through 15093).

Pursuant to CEQA Guidelines §§ 15040 through 15043, and upon completion of the CEQA review process, the County of San Bernardino will have the legal authority to do any of the following:

- Approve the proposed Project;
- Require feasible changes in any or all activities involved in the Project in order to substantially lessen or avoid significant effects on the environment;
- Disapprove the Project, if necessary, in order to avoid one or more significant effects on the environment that would occur if the Project was approved as proposed; or
- Approve the Project even through the Project would cause a significant effect on the environment if the County makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR fulfills the CEQA environmental review requirements for the proposed General Plan Amendment (P201700564), Conditional Use Permit (P201700563), and all other governmental legislative, discretionary, and administrative actions related to the Project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

The California Public Resource Code (§ 21104) requires that all EIRs be reviewed by responsible and trustee agencies (see also CEQA Guidelines § 15082 and § 15086(a)). As defined by CEQA Guidelines § 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 CEQA Guidelines § 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."

For the proposed Project, the Santa Ana Regional Water Quality Control Board (RWQCB) is identified as a Trustee Agency 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. There are no other Trustee Agencies and no Responsible Agencies identified for the Project. Regardless, this EIR can be used by any Trustee Agency or Responsible Agency, whether listed above or not, as part of their decision-making processes in relation to the proposed Project.

1.6 EIR SCOPE, FORMAT AND CONTENT

1.6.1 EIR SCOPE

An Initial Study was prepared for the Project to preliminarily identify the environmental issue areas that may be adversely impacted by the Project. Following completion of the Initial Study, the County of San Bernardino 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 Responsible Agencies, Trustee Agencies, and other interested parties on March 6, 2019, for a 30-day public review period. The NOP was distributed for public review to solicit responses to help the County identify the full scope and range of potential environmental concerns associated with the Project so that these issues could be fully examined in this EIR. In addition, a publicly-noticed EIR Scoping Meeting was held at Walter Zimmerman Elementary School on March 21, 2019, which provided public agencies, interested parties, and members of the general public an additional opportunity to comment on the scope of environmental issues to be addressed in this EIR.

Based on the information contained in the Initial Study and NOP and in consideration of all comments received by the County on the NOP and during the Scoping Meeting, this EIR evaluates in detail the Project's potential to cause adverse effects to the following environmental issue areas (see EIR Section 4.0, *Environmental Analysis*):

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils

- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems

The Initial Study, NOP, public review distribution list, and written comments received by the County of San Bernardino during the NOP public review period are provided in *Technical Appendix A* to this EIR. Substantive comments received in response to the NOP and during the Scoping Meeting are summarized below in Table 1-1, *Summary of NOP and Scoping Meeting Comments*. The purpose of this table is to present 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. Table 1-1 is not intended to list every environmental or CEQA-related comment received by the County during the NOP review period and EIR scoping meeting. Regardless of whether or not an environmental or CEQA-related comment is listed in Table 1-1, all relevant comments received in response to the NOP and during the EIR scoping meeting are addressed in this EIR.

Table 1-1 Summary of NOP and Scoping Meeting Comments

Topic of Concern	Comments Received During NOP Review Period and/or EIR Scoping Meeting	Location in EIR Where Comment is Addressed
Aesthetics	- Concern regarding external lighting of the building's south side and from any building windows.	- Subsection 4.1, *Aesthetics*
Air Quality	- Request that the EIR disclose the potential for the Project to result in adverse health effects related to diesel emissions. - Request for the CalEEMod land use emissions software be used for the Project's air quality analysis. - Request for criteria pollutant emissions from the Project be quantified and compared against the recommended regional significance thresholds. - Recommendation to perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling. - Recommendation of the use of truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in SCAQMD. - Request that the EIR include feasible mitigation measures to avoid or minimize the Project's potential impacts to air quality.	- Subsection 4.2, *Air Quality*
Cultural Resources	- Request for an analysis of the historical relevance of the buildings/structures proposed to be removed from the Project site.	- Subsection 4.4, *Cultural Resources*

Table 1-1 Summary of NOP and Scoping Meeting Comments

Topic of Concern	Comments Received During NOP Review Period and/or EIR Scoping Meeting	Location in EIR Where Comment is Addressed
Cultural Resources (cont.)	- Request for an assessment of whether the Project will have an impact on historical resources and if so, to provide mitigation for such effects. - Request for a records search to be performed through the appropriate regional Archaeological Information Center. - Request to include a mitigation plan with provisions for the identification and evaluation of accidently discovered prehistoric archeological resources, for the disposition of recovered cultural items that are not burial associated, and for the discovery of Native American human remains.	
Hazards and Hazardous Materials	- Concern with the Project adding outside storage tanks, cubes, etc.	- Subsection 4.8, *Hazards and Hazardous Materials*
Hydrology	- Request for a Waste Discharge Identification (WDID) number in accordance with the General Construction Permit.	- Subsection 4.9, *Hydrology and Water Quality*
Land Use and Planning	- Concern regarding hours of allowed operation of the proposed warehouse. - Concern regarding restriction of public access behind the building. - Comment regarding privacy for residents nearby – security camera infringement on nearby properties and insufficient perimeter fencing of the proposed warehouse.	- Subsection 4.10, *Land Use and Planning*
Noise	- Concern regarding noise associated to the Project, including trucks and machinery.	- Subsection 4.11, *Noise*
Transportation	- Request to analyze impacted roads due to additional truck traffic by the Project. - Request for a permit from County Transportation. - Concern regarding trucks idling and short and long-term vehicle parking on Cactus Avenue. - Concern regarding additional traffic on Cactus Avenue and other nearby residential streets.	- Subsection 4.12, *Transportation*
Tribal Cultural Resources	- Request for an assessment of whether the Project will have an impact on tribal cultural resources and if so, to mitigate for such effects. - Request for the County to consult with all California Native American tribes traditionally and culturally affiliated with the geographic area of the Project.	- Subsection 4.13, *Tribal Cultural Resources*
Utilities	- Concern regarding height of the proposed building blocking wave reception for resident-owned antenna and cell phone frequencies.	- Subsection 4.14, *Utilities and Service Systems*

1.6.2 EIR Format and Content

This EIR contains all of the information required to be included in an EIR as specified by the CEQA Statutes and 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 Topics Required By CEQA*, provides a quick reference guide for locating the information required by CEQA within this document.

Table 1-2 Location of Topics Required By CEQA

CEQA Required Topic	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 Proposed Project is Implemented	§ 15126.2(c)	Section 4.0 & Subsection 5.1
Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented	§ 15126.2(d)	Subsection 5.2
Growth-Inducing Impact of the Proposed 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 Proposed Project	§ 15126.6	Section 6.0
Effects Not Found to be Significant	§ 15128	Section 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	Section 4.0

In summary, the content and format of this EIR is as follows:

- **Section S.0, Executive Summary**, provides an overview of the EIR document and CEQA process. The Project, including its objectives, is described, and the location and regional setting of the Project site is documented. In addition, the Executive Summary discloses that there are no potential areas of controversy related to the Project and identifies the potential alternatives

to the proposed Project as required by CEQA. Finally, the Executive Summary provides a summary of the Project's impacts, mitigation measures, and conclusions, in a table that forms the basis of the Project's Mitigation, Monitoring, and Reporting Program (MMRP).

- **Section 1.0, Introduction**, provides introductory information about the CEQA process and the responsibilities of the County 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 CEQA Guidelines § 15123. This section provides a detailed description of the Project, including its purpose, main objectives, design features, construction characteristics, and operational characteristics expected over the Project's lifetime, should development occur on the property. In addition, the discretionary actions required of the County of San Bernardino and other government agencies to implement the Project are discussed.

- **Section 4.0, Environmental Analysis**, provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the proposed 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 CEQA Guidelines also describe the terms "effects" and "impacts" as being synonymous (CEQA Guidelines § 15358).

  In the environmental analysis subsections 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 proposed Project. Impacts are evaluated on a direct, indirect, and cumulative basis. Direct impacts are those that would occur directly as a result of the proposed Project. Indirect impacts represent secondary effects that would result from Project implementation. Cumulative effects are defined in CEQA Guidelines § 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 proposed 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. In most cases, implementation of the mitigation measures would reduce the adverse environmental 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 County of San Bernardino pursuant to CEQA Guidelines § 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; and potential growth-inducing aspects of the proposed Project. Section 5.0 also includes a discussion of the potential environmental effects that were found not be significant during preparation of the Initial Study for the Project and the NOP public review process and that, therefore, do not require a detailed evaluation in this EIR.

- **Section 6.0, Project Alternatives**, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's significant 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 that will foster informed decision making and public participation. Three (3) alternatives, including the CEQA-required No Project Alternative, are evaluated in detail in Section 6.0.

- **Section 7.0, References**, cites all 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.

1.6.3 Incorporation by Reference

CEQA Guidelines § 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." CEQA Guidelines § 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.

This EIR relies on a number of Project-specific technical appendices that are bound separately as *Technical Appendices*. The *Technical Appendices* are available for review at the County of San Bernardino, Land Use Services Department, Planning Division, 385 North Arrowhead Avenue, San Bernardino, CA 92415, during the County's regular business hours or can be requested in electronic form by contacting the County Land Use Services Department, Planning Division. The individual technical studies, reports, and supporting documentation that comprise the *Technical Appendices* are as follows:

A: Initial Study, Notice of Preparation, and Written Comments on the NOP
B1: Air Quality Impact Analysis
B2: Mobile Source Health Risk Assessment
B3: Supplemental Air Quality Impact Analysis
C: Biological Resources Assessment
D: Phase 1 Cultural Resources Assessment
E: Energy Analysis
F1: Geotechnical Report
F2: Soil Infiltration Study
G: Greenhouse Gas Emissions Analysis
H: Phase I Environmental Site Assessment (ESA)
I1: Preliminary Hydrology Report
I2: Preliminary Water Quality Management Plan
J: Noise Impact Analysis
K: Traffic Impact Analysis

Other reference sources that are incorporated into this EIR by reference are listed in Section 7.0, *References*, of this EIR. In most cases, documents or websites not included in the EIR's Technical Appendices are cited by a link to the online location where the document/website can be viewed. References relied upon by this EIR will be available for public review at the County of San Bernardino, Land Use Services Department, Planning Division, 385 North Arrowhead Avenue, San Bernardino, CA 92415.

2.0 ENVIRONMENTAL SETTING

2.1 REGIONAL SETTING AND LOCATION

The approximately 13.3-acre Project site is located within the unincorporated community of Bloomington in the southwest portion of San Bernardino County, California. Bloomington is located north of the City of Jurupa Valley, east of the City of Fontana, and south and west of the City of Rialto. The Project site is located approximately 0.3-mile south of Interstate 10 (I-10), between the Cedar Avenue and Riverside Avenue off-ramps. The site's location in the regional context is shown on Figure 3-1, *Regional Map*, in EIR Section 3.0, *Project Description*.

The Project site is located in an urbanizing area of southern California commonly referred to as the "Inland Empire." The Inland Empire is an approximate 28,000-square-mile region comprising southwestern San Bernardino County, western Riverside County, and the eastern tip of Los Angeles County. According to the California Department of Finance, the estimated 2019 population of San Bernardino County was 2,192,203 persons (DOF, 2019, E-1). The forecast models for the Southern California Association of Governments (SCAG) predict that the population of San Bernardino County will grow to approximately 2.73 million persons by 2040 (SCAG, 2016, Appendix p. 18).

2.2 LOCAL SETTING AND LOCATION

The Project site is located at the southwest corner of the intersection of Slover Avenue and Cactus Avenue. The Project site includes Assessor Parcel Numbers (APN) 0257-071-03, -04, & -39. Figure 3-2, *Vicinity Map*, in EIR Section 3.0, *Project Description* shows the location of the Project site.

2.3 SURROUNDING LAND USES AND DEVELOPMENT

Land uses in the immediate vicinity of the Project site are illustrated on Figure 2-1, *Surrounding Land Uses and Development*, and described below.

North: The Project site is bound by Slover Avenue to the north. The Union Pacific Railroad's West Colton Yard – a classification yard that operates 24 hours per day, 7 days per week and handles approximately 17 trains and 1,436 railroad cars daily – is located immediately north of Slover Avenue (Union Pacific, n.d.). The I-10 Freeway is located north of the West Colton Yard. Industrial land uses are located to the northwest of the Project site (north of Slover Avenue and west of the West Colton Yard), primarily consisting of construction equipment and materials storage yards and associated office buildings.

South: Single-family residences are located immediately south of the Project site. Several of the residential properties located south of the Project site contain multiple outbuildings and appear to support animal keeping, including horses, while others provide parking for trucks and may support independent trucking businesses.

West: The properties located immediately west of the Project site are utilized as the Peña Plant Nursery, which grows ornamental plants in above-ground containers. Single-family residences are located immediately west of the Peña Plant Nursery. Spruce Avenue and single-family residences are located farther west of the Project site. A plot of vacant undeveloped land abuts the southwest corner of the Project site.

East: The Project site is bound by Cactus Avenue on the east, which forms the boundary between unincorporated San Bernardino County and the City of Rialto. A mix of single-family residences and industrial land uses (including a SC Fuels petroleum products distribution yard) are located east of Cactus Avenue. A Flyers Energy petroleum products warehouse and distribution yard and a food processing plant operated by Biscomerica Corporation are located farther to the east, south of Slover Avenue and west of Lilac Avenue. A vacant undeveloped property is located immediately southeast of the Project site across Cactus Avenue.

2.4 PLANNING CONTEXT

2.4.1 COUNTY OF SAN BERNARDINO GENERAL PLAN AND ZONING

The County of San Bernardino's prevailing planning documents are its General Plan and Development Code. As depicted on Figure 2-2, *Existing San Bernardino County Land Use Plan*, the County's General Plan and Development Code designate the Project site for "Single Residential" (RS-1) land uses. The RS-1 land use designation is intended to provide areas for single-family homes on individual lots. The maximum permitted density for the RS-1 land use designation is 1 dwelling unit per acre (du/ac) (County of San Bernardino, 2007, Table LU-1).

Additionally, an Additional Agriculture (AA) Overlay applies to the Project site. According to County's Development Code, the purpose of the AA Overlay is to "create, preserve, and improve areas for small-scale and medium-scale agricultural uses utilizing productive agricultural lands for raising, some processing, and the sale of plant crops, animals, or their primary products. It is an overlay where agricultural uses exist compatibly with a variety of rural residential lifestyles" (County of San Bernardino, 2018a, § 82.07.010).

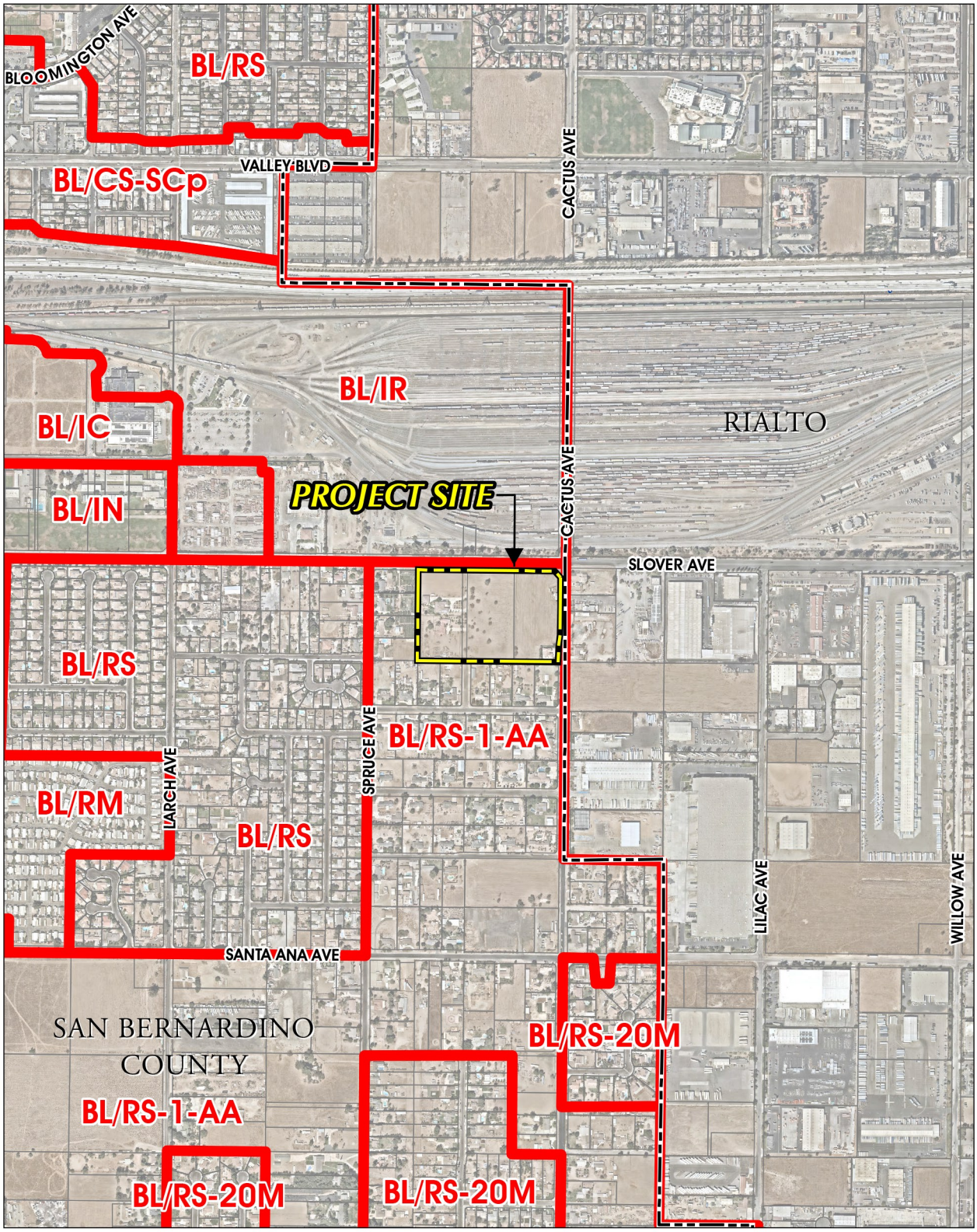
As required by CEQA Guidelines § 15125(d), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans. The Project Applicant proposes to develop the Project site as an industrial warehouse facility. The principal discretionary actions required of the County of San Bernardino to implement the Project are described in detail in EIR Section 3.0, *Project Description*. As noted in EIR Section 3.0, the land use proposed by the Project Applicant (i.e., industrial warehouse) is not consistent with the existing General Plan land use designation for the subject property and, as such, the Applicant proposes to change the land use and zoning designations applied to the property to "Community Industrial (IC)," which would allow the proposed industrial warehouse land use. The potential environmental effects that could result from the Project's inconsistency with the property's existing land use designation are evaluated in Section 4.0, *Environmental Analysis,* of this EIR.

Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

Figure 2-1

0 112.5 225 450 Feet

Surrounding Land Uses and Development



Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

Figure 2-2

0 250 500 1,000 Feet

Existing San Bernardino County Land Use Plan

2.4.2 Ontario International Airport Land Use Compatibility Plan

The Ontario International Airport Land Use Compatibility Plan (ALUCP) identifies land use standards and design criteria for new development located in the proximity of the airport to ensure compatibility between the airport and surrounding land uses and to maximize public safety. The Project site is located within the airport influence area (AIA) of the Ontario International Airport and is subject to the Ontario International Airport ALUCP. Within the area of the AIA where the Project site is located, the ALUCP does not impose any land use or design restrictions and building heights are permitted to exceed 200 feet. The Project site is not located within any Safety Zone, Noise Impact Zone, or Airspace Protection Zone for the ONT but is located in an area that requires overflights to be disclosed during real estate transactions. (City of Ontario, 2010, Policy Maps 2-1 to 2-5)

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. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region.

SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* develops long-range regional transportation plans including 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 emissions reduction targets set forth by the California Air Resources Board (CARB); these objectives were provided as 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. 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, and assumes this land use pattern will continue until at least the year 2040. (SCAG, 2016)

2.5 Existing Physical Site Conditions

CEQA Guidelines § 15125(a)(1) recommends that the physical environmental condition as it existed at the time the EIR's NOP was released for public review normally be used as the comparative baseline for the EIR. The NOP for this EIR was released for public review on March 6, 2019, and the following pages include a description of the Project site's physical environmental condition ("existing conditions") as of that approximate date. More information regarding the Project's site's

environmental setting is provided in the specific subsections of EIR Section 4.0, *Environmental Analysis*.

2.5.1 Land Use

As shown on Figure 2-3, *Aerial Photograph*, the Project site is mostly vacant with the exception of four (4) single-family residences: two (2) on the western portion, one at the southeastern corner and one on the northeastern portion of the Project site. The central portion of the Project site consists of former (fallow) agricultural land that is routinely maintained (i.e., disced) for weed abatement.

2.5.2 Aesthetics and Topographic Features

The topography of the Project site is relatively flat with elevations ranging from approximately 1,045 feet above mean sea level (amsl) in the northwest portion of the Project site to approximately 1,030 amsl in the southeast portion of the site. Ornamental landscaping surrounds the four residences on the Project site but, otherwise, there are no aesthetic features, including rock outcroppings or other unique topographic features, on the property. Figure 3-3, *USGS Topographic Map*, in EIR Section 3.0, *Project Description*, depicts the Project site's existing topographic conditions

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 and 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. As documented in the Project's Air Quality Impact Analysis (AQIA; *Technical Appendix B1* to this EIR), 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. (Urban Crossroads, 2019a, pp. 8-9)

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_3; one-hour and eight-hour), particulate matter (PM_{10} [State standard only] and $PM_{2.5}$), and Lead (only in Los Angeles County). No areas of the SCAB exceeded federal or State standards for nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), or sulfates. (Urban Crossroads, 2019a, p. 12)

Refer to EIR Subsections 4.2, *Air Quality*, and 4.7, *Greenhouse Gas Emissions*, for a more detailed discussion of the Project's site existing air quality and climate setting.

Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

Figure 2-3

0 75 150 300 Feet

Aerial Photograph

2.5.4 Cultural Resources & Tribal Cultural Resources

Under existing conditions, the Project site is vacant with the exception of four (4) single-family residences all of which were constructed in the 1990s and 2000s and are considered "modern" from an archaeology perspective and, therefore, not considered historic age structures (L&L, 2018b, p. 44). A records search and a pedestrian survey of the Project site were completed by L&L Environmental, Inc. (hereafter referred to as "L&L"), which did not identify any known historical or archaeological resources within or located in the immediate vicinity of the Project site (L&L, 2018b, p. 45). L&L completed a Sacred Lands File search through the Native American Heritage Commission (NAHC) which did not indicate the presence of Native American cultural resources within or in the immediate vicinity of the Project site although it was determined that the Project site is located within the traditional use area of the Morongo Band of Mission Indians (MBMI) and the Soboba Band of Luiseño Indians (hereafter referred to as the "Soboba Band"). (L&L, 2018b, p. iv)

Refer to EIR Subsections 4.4, *Cultural Resources*, and 4.13, *Tribal Cultural Resources*, for a more thorough discussion of the Project's site existing cultural setting.

2.5.5 Geology and Soils

Regionally, the Project site is located in the Peninsular Ranges geomorphic province, a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded to the east by the Colorado Desert. The Peninsular Ranges province is composed of plutonic and metamorphic rock, lesser amounts of Tertiary Volcanic and sedimentary rock, and Quaternary drainage in-fills and sedimentary veneers.

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. No known active or potentially-active faults exist on or near the Project site nor is the site situated within an "Alquist-Priolo" Earthquake Fault Zone. The nearest known fault to the Project site is the San Jacinto Fault, located approximately 3.4 miles to the northeast. Similar to other properties throughout southern California, the Project site is located within a seismically active region and is subject to ground shaking during seismic events. (Norcal Engineering, 2017a, p. 3)

The Project site is underlain by fill soils and native soils. Fill soils are found on the Project site at depths ranging up to 1.0 to 1.5 feet below ground surface. The observed fill soils are classified as loose and containing gravel, small cobbles, roots, and minor debris. Native soils, classified as silty sand with some gravel, are found beneath the upper fill soils and extend to at least 18.5 feet below the existing ground surface. (Norcal Engineering, 2017a, pp. 3-4)

2.5.6 Hydrology

The Project site is located in the Santa Ana River watershed, which drains an approximately 2,840-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, where it discharges into the Pacific Ocean at the City of Huntington Beach. 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. (SWRCB, 2016b)

Under existing conditions, stormwater runoff flows from the Project site travel southeasterly toward Cactus Avenue. Surface runoff flows on the western portion of the Project site flow in a westerly direction towards the off-site properties to the west.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Nos. 06071C8667H and 06071C8659H, the Project site is not located within a special flood hazard area subject to inundation by the 1-percent annual flood (100-year flood). The entirety of the Project site is located within FEMA Flood Zone X (Unshaded), which is correlated with areas of minimal flood hazard determined to be outside the 500-year floodplain (also referred to as the 0.2% annual chance floodplain). (FEMA, 2008)

Refer to EIR Subsection 4.9, *Hydrology and Water Quality*, for a more detailed discussion of the Project's site existing hydrology and water quality setting.

2.5.7 Noise

Primary sources of noise in the Project vicinity include traffic noise from vehicles traveling along Slover Avenue, noise from operations at the nearby rail yard, and aircraft overflight noise. Urban Crossroads, Inc. collected 24-hour noise measurements at seven (7) locations in the Project vicinity on May 9, 2018, to determine the baseline for the existing noise environment. Measured daytime noise levels in the area ranged from 55.8 equivalent level decibels (dBA Leq) to 71.4 dBA Leq and nighttime noise levels from 53.6 dBA Leq to 68.3 dBA Leq. The measured noise levels correlate to a Community Noise Level (CNEL) ranging from 60.9 CNEL to 75.6 CNEL. (Urban Crossroads, 2019f, Table 5-1)

Refer to EIR Subsection 4.11, *Noise*, for a more detailed discussion of the Project's site existing noise setting.

2.5.8 Transportation

The Project site is located south of Slover Avenue, west of Cactus Avenue, approximately 320 feet north of Otilla Street, and approximately 310 feet east of Spruce Avenue. Existing traffic on nearby roadways consists of both passenger vehicles and trucks accessing the existing residential, commercial, and industrial uses surrounding the Project site.

Field observations conducted in 2018 indicated that there is nominal pedestrian and bicycle activity in the area (Urban Crossroads, 2019g, p. 37). Public transit service in the region is provided by Omnitrans, with local bus service along Cedar Avenue and Slover Avenue via Route 29. The nearest

Route 29 transit stop is located approximately 430 feet northwest of the Project site, near the intersection of Slover Avenue and Spruce Avenue. (Urban Crossroads, 2019g, p. 43; Google Earth Pro, 2019)

The primary regional vehicular travel route to the Project area is I-10, which is located approximately 0.3-mile north of the Project site. The Project site is located approximately 0.6 mile southeast of the Cedar Avenue on/off ramp to I-10 and approximately 0.8 mile southwest of the Riverside Avenue on/off ramp to I-10. I-10 provides access to I-15 (located approximately 9.1 miles to the west of the Project site) and I-215 (located approximately 5.0 miles to the east of the Project site). Both I-15 and I-215 provide access to/from SR-60 (located approximately 3.9 miles to the south of the Project site). (Google Earth Pro, 2019)

Refer to EIR Subsection 4.12, *Transportation*, for a more detailed discussion of the Project site's existing transportation setting.

2.5.9 Utilities and Service Systems

The Project site is located in the service area of the West Valley Water District (WVWD) for domestic water service. Under existing conditions, water lines are installed adjacent to the Project site, beneath both Cactus Avenue and Slover Avenue. The Project site is located in the service area of the City of Rialto for sewer service. Wastewater flows generated within the Project area are collected by an existing sewer pipe network installed beneath Slover Avenue; collected wastewater flows are conveyed to the Rialto Wastewater Treatment Plant. Solid waste from the Project site is expected to be disposed at the Mid-Valley Landfill and/or the San Timoteo Landfill.

2.5.10 Vegetation

The entire Project site has been either previously disturbed or developed. Disturbed area consists of existing residences and associated landscaping, which contain sparse cover of non-native annual grasses and forbs, a few common native species (including Native blue elderberry trees [*Sambucus Mexicana*]), and general semi-natural herbaceous stands. The developed areas include areas disturbed as part of construction and habitation of the four (4) existing onsite residences as well as areas covered by ornamental landscaping. The Project site does not contain special-status vegetation and does not support sensitive vegetation communities. (L&L, 2018a, pp. 16-17)

Refer to EIR Subsection 4.3, *Biological Resources*, for a more detailed discussion of the Project's site existing biological setting.

2.5.11 Wildlife

One special-status wildlife species, the California horned lark (*Eremophila apestris actia*), was observed on the Project site during a biological survey conducted in 2018. No other special-status wildlife species were observed on the Project site (L&L, 2018a, p. 18). During the field survey, 24 additional, non-special status wildlife species were observed on the Project site, primarily consisting

of numerous avian species, as well as several small mammal species and a reptile species (L&L, 2018a, p. 18). The complete list of wildlife species observed on the Project site is documented in EIR *Technical Appendix C1*.

Refer to EIR Subsection 4.3, *Biological Resources*, for a more detailed discussion of the Project's site existing biological setting.

2.5.12 Rare and Unique Resources

As required by CEQA Guidelines § 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 government 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 LOCATION

The approximately 13.3-acre Project site is located within the unincorporated community of Bloomington, in the southwest portion of San Bernardino County, California (see Figure 3-1, *Regional Map*). From a regional perspective, the Project site is located north of the City of Jurupa Valley, east of the City of Fontana, and south and west of the City of Rialto.

At the local scale, the Project site is located at the southwest corner of the intersection of Slover and Cactus Avenues (see Figure 3-2, *Vicinity Map*, and Figure 3-3, *USGS Topographic Map*). The Project site includes three (3) individual parcels: Assessor Parcel Numbers (APNs) 0257-071-03, -04, & -39.

Additional information about the Project site's location and setting is provided in EIR Section 2.0, *Environmental Setting*.

3.2 STATEMENT OF OBJECTIVES

The fundamental goal of the Project is to accomplish the orderly development of an industrial warehouse facility on the Project site. The Project would achieve this goal through the following objectives.

1. To develop a vacant or underutilized property with an industrial building to help meet the substantial and unmet regional demands for this type of building space.
2. To expand economic development and facilitate job creation in the County of San Bernardino by establishing new industrial development adjacent to or near already-established industrial uses.
3. To attract new businesses to the County of San Bernardino and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.

4. To develop Class A industrial buildings in the County of San Bernardino that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar buildings in the local area and region.

5. To develop a property that has access to available infrastructure, including roads and utilities.

6. To develop an industrial building with loading bays in close proximity to the I-10 Freeway that can be used as part of the southern California goods movement network.

7. To develop light industrial uses in close proximity to designated truck routes and the State highway system to avoid or shorten truck-trip lengths on other roadways.

3.3 PROJECT'S COMPONENT PARTS

The Project evaluated in this EIR includes legislative and site development components. The legislative component involves a General Plan Amendment (GPA, P201700564) to change the land use designation for the Project site from a residential category to an industrial category. The site development component comprises a Conditional Use Permit (CUP, P201700563) to allow the construction and operation of an industrial warehouse building. The individual components of the Project are discussed below.

3.3.1 GENERAL PLAN AMENDMENT (P201700564)

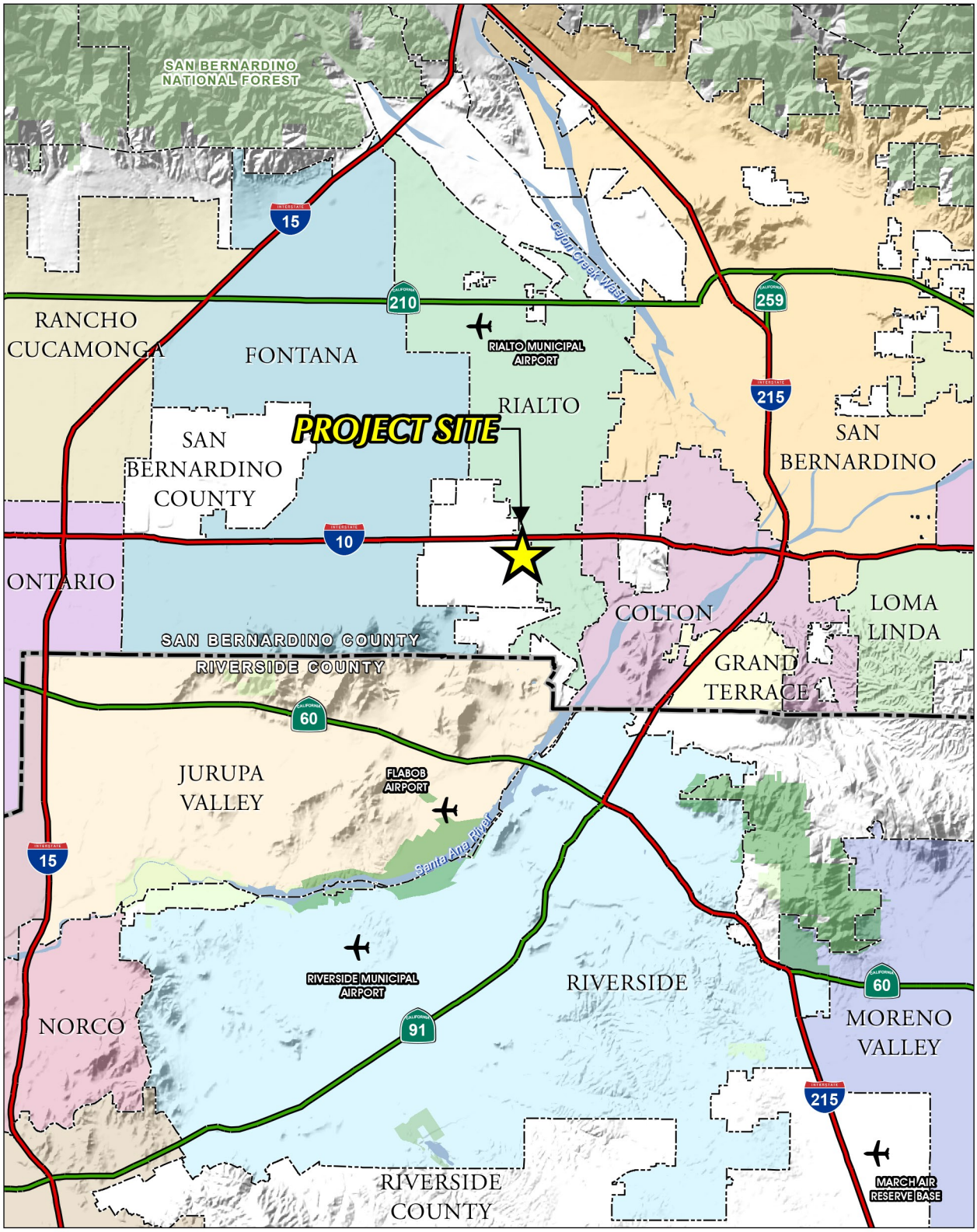
The proposed GPA (P201700564) would amend the County of San Bernardino's Land Use Zone map designation for the Project site from "Single Residential, one-acre minimum lot size, with Additional Agriculture Overlay (RS-1-AA)" to "Community Industrial (IC)." Refer to Figure 3-4, *Proposed General Plan Amendment (P201700564)*. The Community Industrial (IC) designation provides for light industrial uses, such as wholesale/warehouse services, with a floor area ratio (FAR) up to 0.45 in the Valley Region.

3.3.2 CONDITIONAL USE PERMIT (P201700563)

The proposed CUP (P201700563) provides a conceptual development plan for an industrial warehouse building with 257,855 square feet (s.f.) of building area, including a site plan, architectural design, and landscape plan. The warehouse building is proposed on a speculative basis, meaning that the future occupant(s) of the building is/are not known at the time of writing this EIR.

A. Conceptual Site Plan

The proposed warehouse building is rectangular-shaped with its elongated walls parallel to Slover Avenue and the property's south property line. Access to the Project site would be provided from two private driveways connecting to Slover Avenue and two private driveways connecting to Cactus Avenue. The driveway in the northwest corner of Slover Avenue would allow access to both passenger cars and trucks; the driveway in the northeast corner of Slover Avenue would allow access

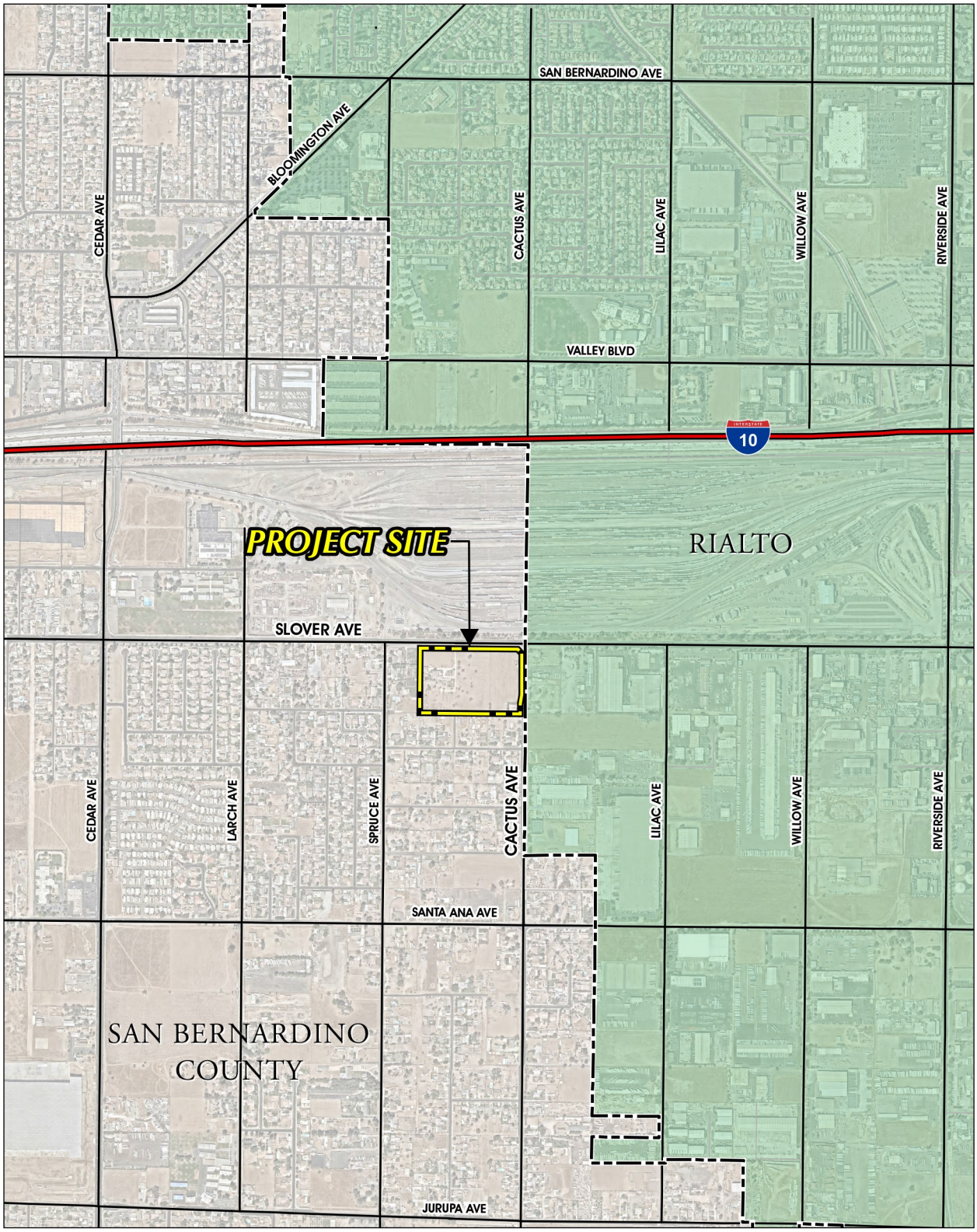


Source(s): ESRI, RCTLMA (2018), SANBAG (2017)

Figure 3-1

0 0.75 1.5 3 Miles

Regional Map

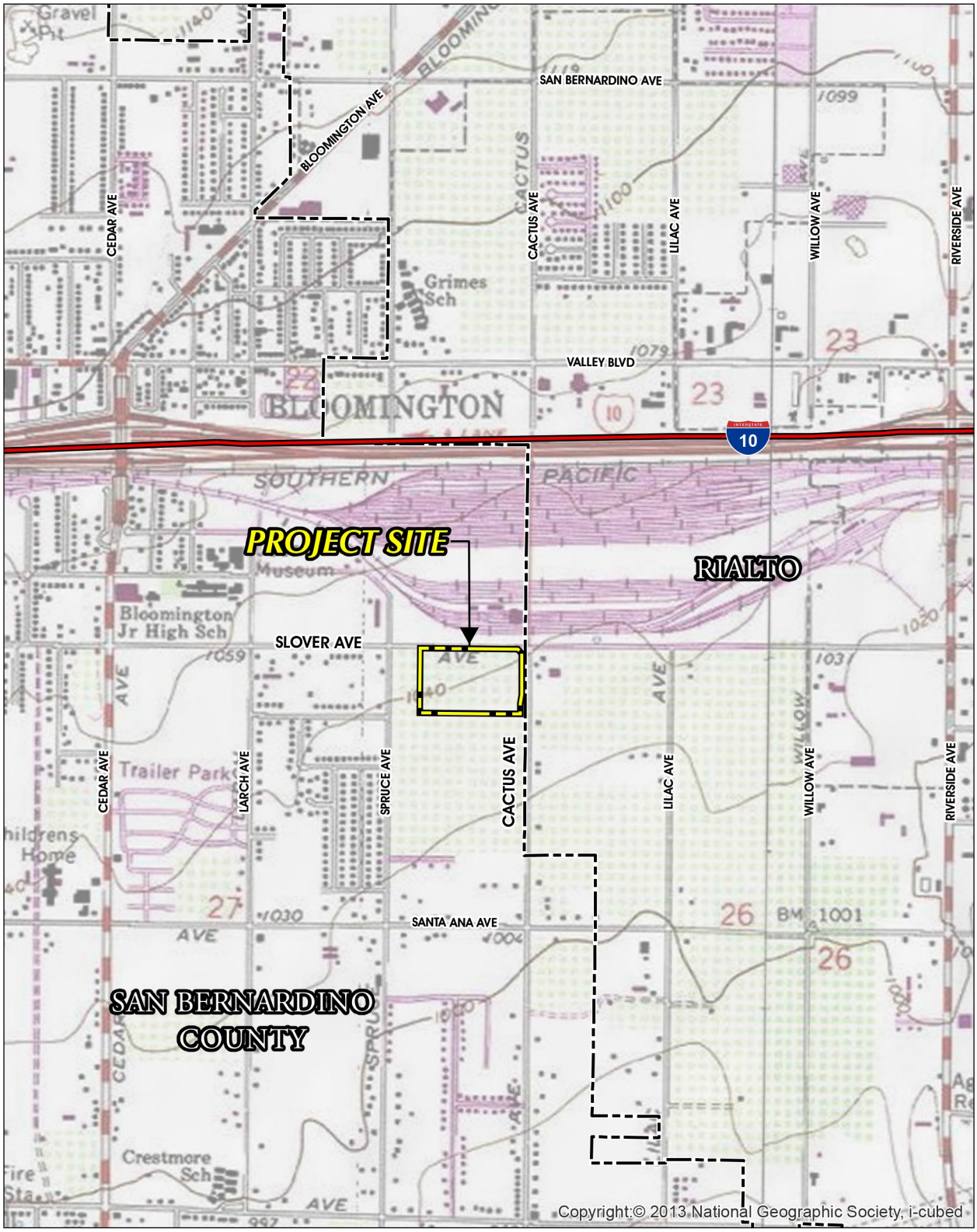


Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

0 350 700 1,400 Feet

Figure 3-2

Vicinity Map

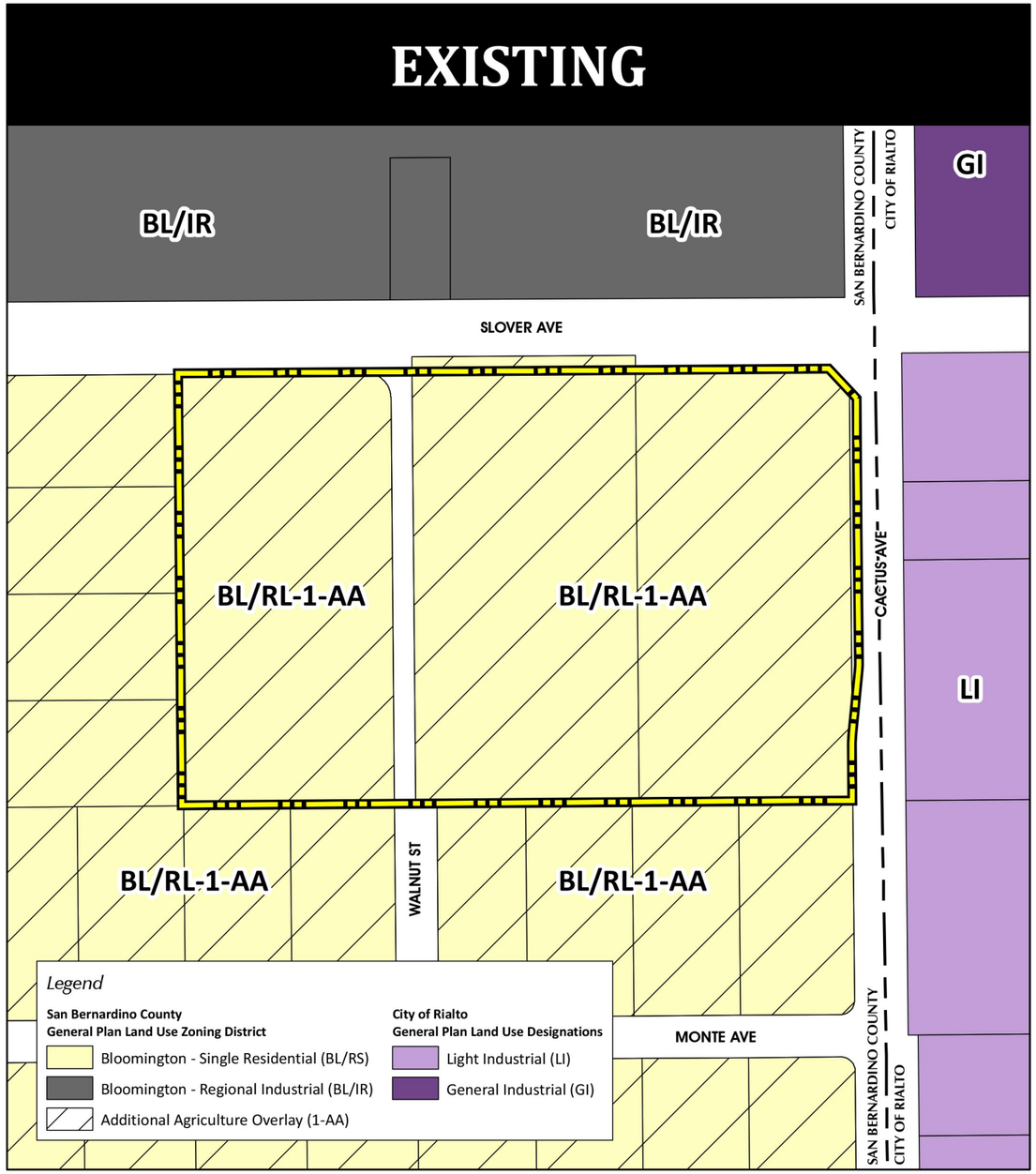


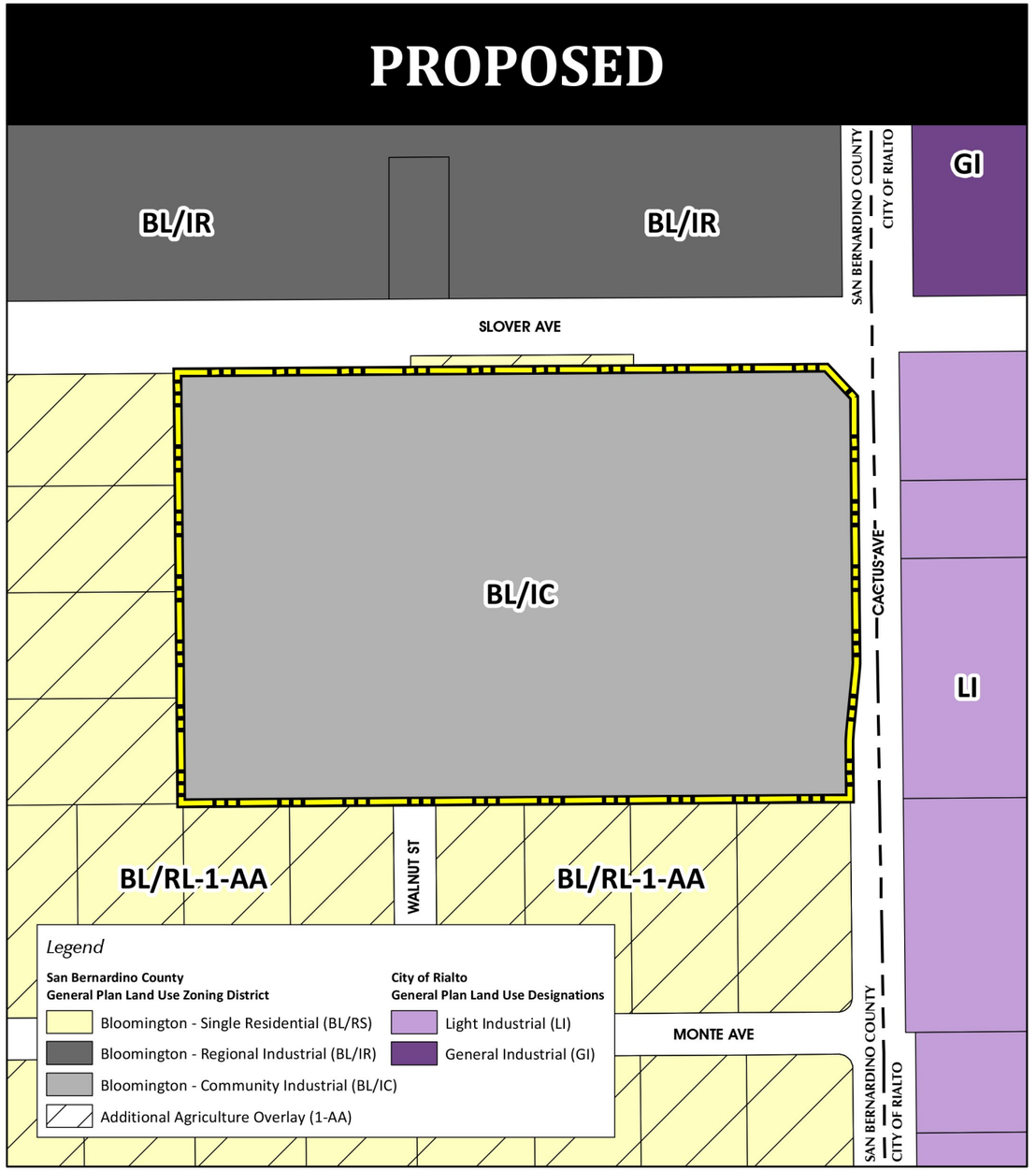
Source(s): USGS (2013)

Figure 3-3

0 350 700 1,400 Feet

USGS Topographic Map





Source(s): ESRI, SANBAG (2017), SBCTA (2018)

0 50 100 200 Feet

Figure 3-4

Proposed General Plan Amendment (P201700564)

to trucks; the driveway in the northeast portion of Cactus Avenue would allow access to both passenger cars and trucks; and the driveway in the southeast corner of Cactus Avenue would allow access to passenger cars. An enclosed truck court with 38 loading docks and ±104 trailer parking spaces would be provided on the north side of the building. Approximately (±) 134 automobile parking spaces are distributed on the west and east sides of the building. The number of parking spaces (automobiles and trailers) are identified as approximate (±) to acknowledge the possibility of striping revisions in the future to accommodate the needs of future building occupants. The conceptual site plan for the Project site is illustrated on Figure 3-5.

B. Conceptual Architecture Plan

The proposed warehouse building is designed to reach a typical height of 42 feet above the finished floor elevation; however, the building would have a varied roofline and the maximum height (including parapets) would extend to 45 feet above the finished floor elevation. The building would be constructed of painted concrete tilt-up panels and low-reflective, blue glass. The building's exterior color palette would be comprised of various shades of white and gray with dark blue accents. Decorative building elements include panel reveals, parapets, mullions, and metal canopies at office entries. The conceptual building elevations are illustrated on Figure 3-6, *Conceptual Building Elevations*. The interior of the proposed building is designed to provide a main warehouse floor and office space(s) on the northeast and northwest portions of the building. A wrought iron fence and gates, painted black, would enclose the truck court and loading area proposed on the north side of the warehouse building.

C. Conceptual Landscape Plan

All existing vegetation, including trees, on the Project site would be removed and replaced with the plant material specified on the *Conceptual Landscape Plan*, which is illustrated on Figure 3-7. Proposed landscaping would be ornamental in nature and would feature drought-tolerant trees, shrubs, and groundcovers. As shown on Figure 3-7, trees planted at regular intervals and masses of shrubs and groundcovers are proposed along the Project site's frontage with Slover Avenue and Cactus Avenue. Landscaping also would be concentrated at driveways, at the building's entries and in and around automobile parking areas. Prior to issuance of a building permit, the Project Applicant would be required to submit final planting and irrigation plans to the County of San Bernardino for review and approval. The plans are required to comply with the "Landscaping Standards" from Chapter 83.10 of the San Bernardino County Development Code, which establishes requirements for landscape design, automatic irrigation system design, and water-use efficiency.

3.4 PROJECT TECHNICAL CHARACTERISTICS

3.4.1 PROJECT IMPROVEMENTS

A. Public Road Improvements

Under existing conditions, Slover Avenue is a four-lane east-west oriented roadway with a painted median and lanes that is classified as a 104-foot-wide Major Highway by the County of San

Bernardino Circulation Master Plan. The Project would improve the south side of Slover Avenue to its ultimate half-width along the Project site's frontage, including the construction of a 6-foot-wide curb-adjacent sidewalk, curb and gutter, re-paving/widening the existing eastbound travel way, and striping two (2) 100-foot-long two-way left-turn lanes along westbound Slover Avenue to facilitate access to/from the two (2) Project driveways proposed along Slover Avenue.

Under existing conditions, Cactus Avenue is a two-lane north-south oriented roadway with a painted median that is classified as a 66-foot-wide Collector by the County of San Bernardino Circulation Master Plan. The Project would improve the west side of Cactus Avenue along the Project site's frontage to its ultimate half-with, which would include the construction of an 11 to 12-foot-wide curb-adjacent sidewalk, curb and gutter, and re-paving/widening the existing southbound travel way.

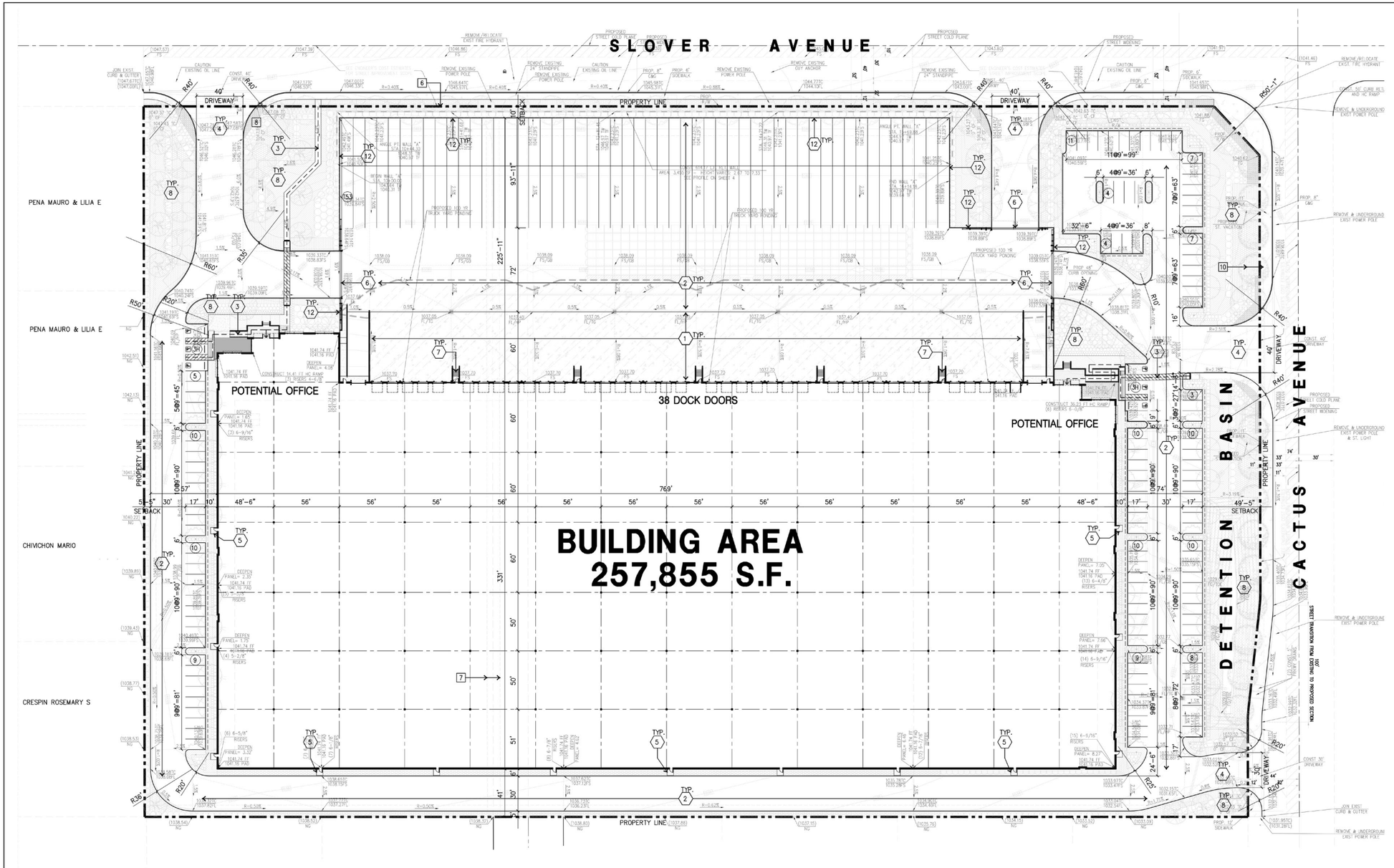
Implementation of the Project also would include the vacation/abandonment of the public right-of-way for Walnut Avenue between Otilla Avenue and Slover Avenue. No physical improvements associated with Walnut Avenue have been constructed on the Project site (previous offerings of public right-of-way were rejected by the County of San Bernardino); the on-site street segment is known as a "paper street." The off-site segment of Walnut Avenue (between Otilla Avenue and the southern Project site boundary) is a dead-end, single-lane road/alley under existing conditions and would be abandoned.

B. Water and Sewer Infrastructure Improvements

Water service would be provided to the Project by the West Valley Water District (WVWD). The Project would construct four (4) new connections to the existing 12-inch-diameter water main beneath Cactus Avenue – two (2) connections for fire service, one (1) connection for new domestic service, one (1) connection for irrigation service. The Project also would construct two (2) public fire hydrants in the sidewalk proposed along the Project site's frontage with Cactus Avenue. All proposed water facilities would be designed and constructed in accordance with WVWD standards.

The City of Rialto would provide sewer service to the Project. The Project would construct one (1) new connection to the existing 12-inch-diameter sewer main located beneath Slover Avenue. The proposed wastewater connection is required to be designed and constructed in accordance with City of Rialto standards.

The Project's proposed water and sewer infrastructure improvements are depicted on Figure 3-8, *Conceptual Water and Sewer Plan*.



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONC. PAVEMENT,
2. ASPHALT CONCRETE (AC) PAVING
3. CONCRETE WALKWAY
4. DRIVEWAY APRONS TO BE CONSTRUCTED PER "L" DRAWINGS.
5. 5'-6"X5'-6"X4" MIN. THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH. SLOPE TO BE 1/4" - 12" MAX. PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY W/ 1:20 MAX. AS REQ. BY CITY INSPECTOR.
6. 8' H PROVIDE METAL, MANUAL OPERATED GATES W/ KNOX-PAD LOCK PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY.
7. EXTERIOR CONC. STAIR.
8. LANDSCAPE. SEE "L" DWGS.
9. CONCRETE TILT-UP SCREEN WALL
10. BIKE RACK.
11. APPROXIMATE LOCATION OF TRANSFORMER.
12. WROUGHT IRON FENCE.

SITE LEGEND

- LANDSCAPED AREA
- AC. PAVING - SEE "C" DRWGS. FOR THICKNESS
- CONCRETE PAVING SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL (9' X 19')
- STANDARD PARKING STALL (9' X 17' W/2' OVERHANG)
- HANDICAP PARKING STALL (9' X 19')
- PROPERTY LINE
- PATH OF TRAVEL

TABULATION

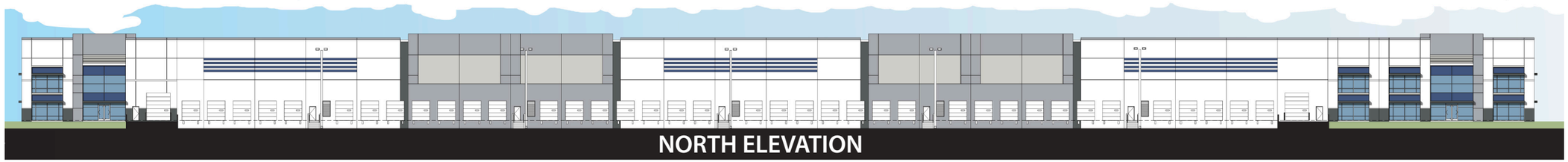
SITE AREA	
In s.f.	578,056 s.f.
In acres	13.27 ac
BUILDING AREA	
Office	10,000 s.f.
Warehouse	247,855 s.f.
TOTAL	257,855 s.f.
COVERAGE	44.6%
AUTO PARKING REQUIRED	
Office: 1/250 s.f.	40 stalls
Whse: 1st 40K @ 1/1,000 s.f.	40 stalls
Whse: above 40K @ 1/4,000 s.f.	52 stalls
TOTAL	132 stalls
AUTO PARKING PROVIDED	
Standard (9' x 19')	128 stalls
Handicap (9' x 19')	6 stalls
Total parking provided	134 stalls
TRAILER PARKING PROVIDED	
Trailer (10' x 53')	104 stalls
ZONING ORDINANCE FOR CITY	
Current Zoning Designation - BL/RS-1 AA	
MAXIMUM BUILDING HEIGHT ALLOWED	
Height - 150'	
MAXIMUM FLOOR AREA RATIO	
FAR - .45	
LANDSCAPE REQUIREMENT	
Percentage -	15%
LANDSCAPE PROVIDED	
Percentage -	15.1%
In s.f.	87,097 s.f.
SETBACKS	
Building	Landscape
Front - 25'	10' from street
Side / Street side- 25'	
Side Interior - 10'	
Rear - 0', when the adjacent property is not deisgnated as commercial or industrial - 10'	

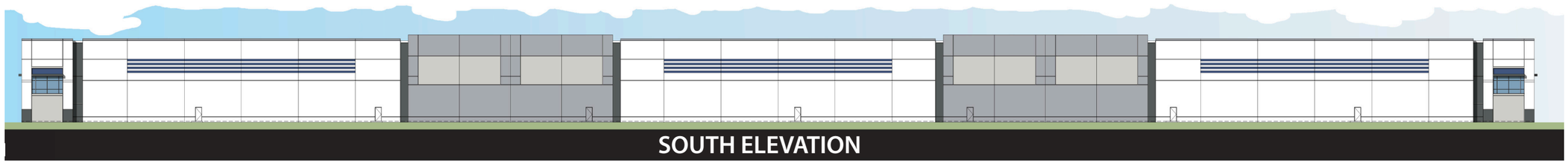
Source(s): HPA Architecture (09-11-2018)

Figure 3-5

Not to Scale

Conceptual Site Plan



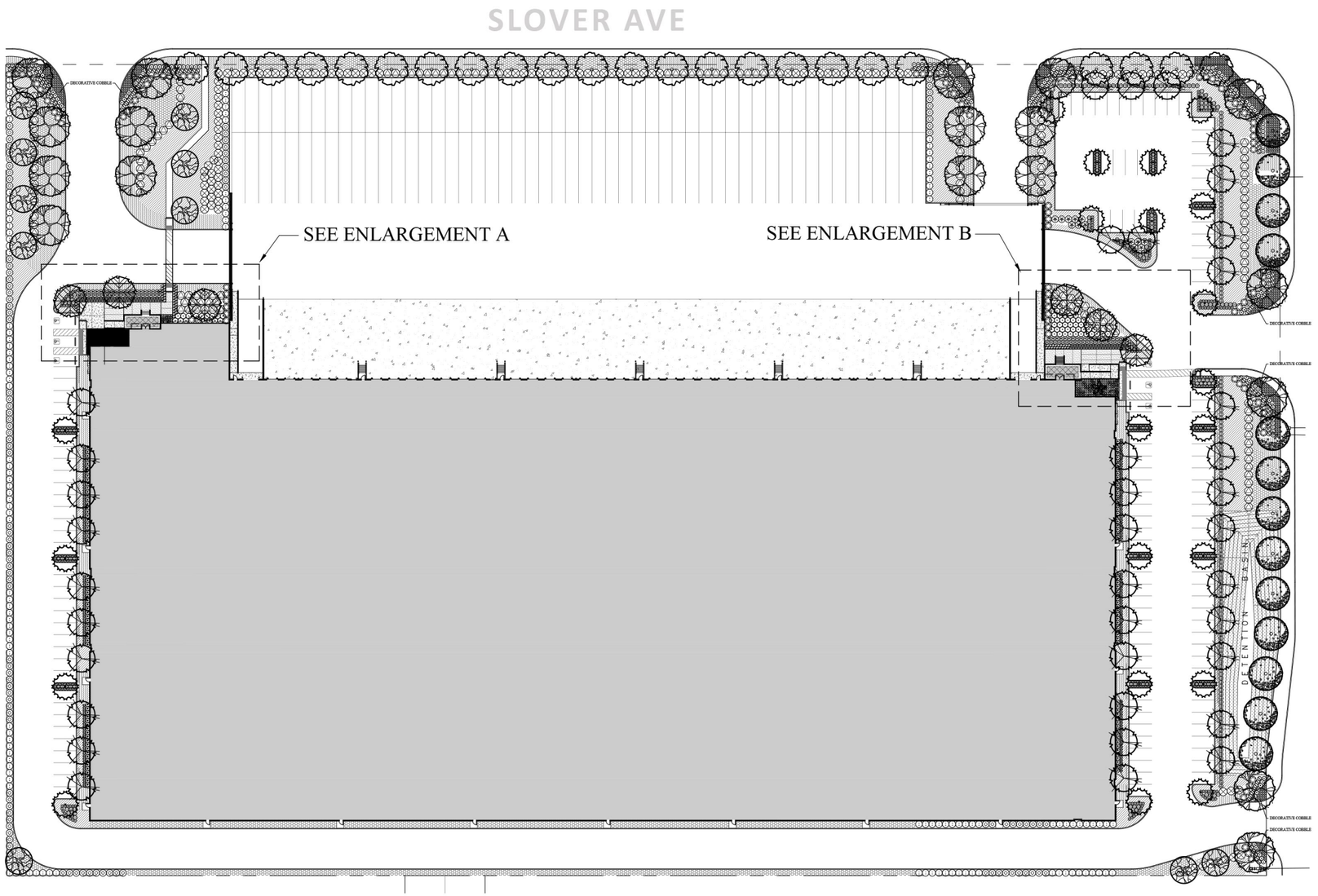


Source(s): HPA Architecture (10-05-2018)

Figure 3-6

Not to Scale

Conceptual Building Elevations



PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE	QTY
	•PARKING LOT TREES - 24" BOX			
	RHUS LANCEA	AFRICAN SUMAC	L	21
	EUCALYPTUS LEUCOXYLON	WHITE IRONBARK	L	37
	•STREET TREES - 24" BOX			
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	M	13
	CINNAMOMUM CAMPHORA	CAMPHOR TREE	M	23
	•ACCENT TREES - 48" BOX TREES, 18 B.T.F. PALMS			
	PARKINSONIA X. 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE	L	6
	PHOENIX DACTYLIFERA	DATE PALM	M	2
	•BACKGROUND TREES - 24" BOX TREES			
	SCHINUS MOLLE	CALIFORNIA PEPPER TREE	L	10
	•SPECIMEN TREES - 60" BOX			
	QUERCUS AGRIFOLIA	COAST LIVE OAK	L	18

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE	QTY
	•ENTRY ACCENT SHRUBS 1 GAL. @ 12"-24" O.C.			
	COTINUS C. 'ROYAL PURPLE'	PURPLE SMOKE TREE	L	118
	BERBERIS T. 'CRIMSON PYGMY'	DWARF JAPANESE BARBERRY	M	162
	AGAVE 'BLUE GLOW'	BLUE GLOW AGAVE	L	162
	•TALL BACKGROUND SCREEN SHRUBS 5-15 GAL. @ 60" O.C.			
	ARBUTUS U. 'COMPACTA'	COMPACT STRAWBERRY TREE	L	130
	GREVILLEA 'NOELLI'	NOEL'S GREVILLEA	L	107
	•SHRUBS AND GROUNDCOVERS 1-3 GAL. @ 12"-42" O.C.			
	BACCHARIS P. 'PIGEON POINT'	DWARF COYOTE BRUSH	L	@60" O.C.
	ROSMARINUS 'HUNTINGTON CARPET'	ROSEMARY	L	@48" O.C.
	COTINUS C. 'ROYAL PURPLE'	PURPLE SMOKE TREE	L	--
	AGAVE PARRYI VAR. TRUNCATA	ARTICHOKE AGAVE	L	35
	BOUGAINVILLEA 'RASPBERRY ICE'	RASPBERRY ICE BOUGAINVILLEA	L	158
	LANTANA X. 'MONNE'	SPREADING SUNSHINE LANTANA	L	113
	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	L	232
	ARTEMISIA 'CANYON GREY'	CANYON GREY ARTEMISIA	L	@42" O.C.
	ANIGOZANTHOS 'BUSH PEARL'	DWARF KANGAROO PAW'S	L	73
	ACHILLEA M. 'PAPRIKA'	COMMON YARROW	L	104
	MUHLENBERGIA C. 'LENCA'	REGAL MIST PINK MUHLY GRASS	L	61

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE	QTY
	•MEDIUM SCREEN HEDGE 5 GAL. @ 36-48" O.C.			
	ARBUTUS U. 'COMPACTA'	COMPACT STRAWBERRY TREE	L	186
	•PARKING LOT SHRUBS 1-5 GAL. @ 18"-36" O.C.			
	STIPA TENUISSIMA	MEXICAN FEATHER GRASS	L	391
	HESPERALOE P. 'PERPA'	BRAKELIGHTS RED YUCCA	L	152
	ROSMARINUS 'HUNTINGTON CARPET'	ROSEMARY	L	@48" O.C.
	CISTUS X. 'PURPUREUS'	ORCHID ROCKROSE	L	13
	ARTEMISIA 'CANYON GREY'	CANYON GREY ARTEMISIA	L	@42" O.C.
	ANIGOZANTHOS 'BUSH GOLD'	KANGAROO PAW'S	L	185
	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	L	--

•HYDROSEED

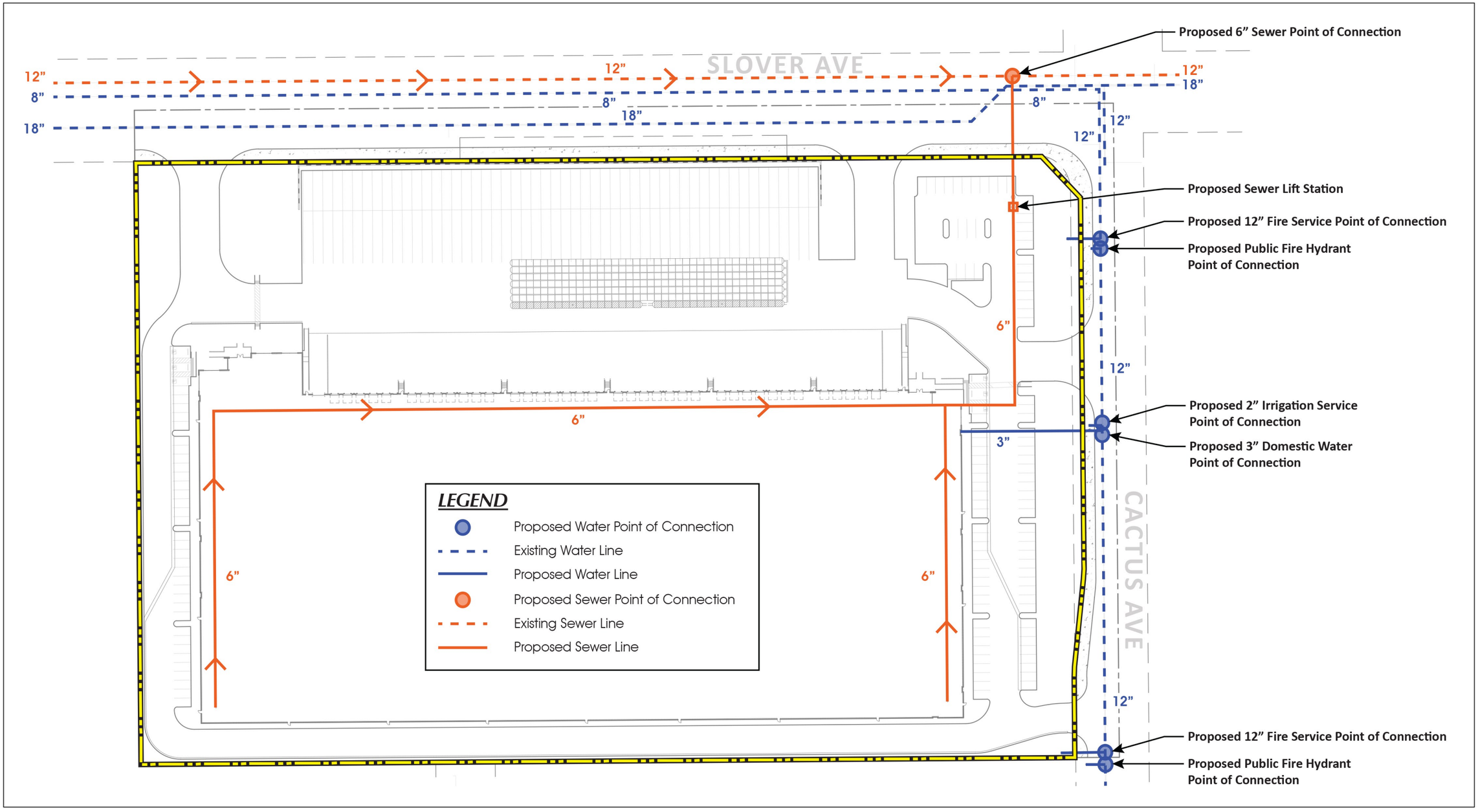
GRASS SEED MIX:	
BROMUS CARINATUS	20.0 LBS/ACRE*
ELYMUS TRICOIDES	4.0 LBS/ACRE*
HORDEUM BRACHYANTHERUM	5.0 LBS/ACRE*
TRIFOLIUM CILIOLATUM	6.0 LBS/ACRE*
ACMISPON AMERICANUS	1.0 LBS/ACRE*
CRESSA TRUXILLENSIS	0.1 LBS/ACRE*
	34.1 LBS/ACRE*
*PURE LIVE SEED LBS/ACRE	
SLURRY MIX:	
FLEXTERRA HF-FGM	3,500 LBS/ACRE
BIOSOL FORTE 7-2-1	600 LBS/ACRE
AM 120 MYCORRHIZAL INOCULUM	60 LBS/ACRE

Source(s): Emerald Design (06-12-2018)

Figure 3-7

Not to Scale

Conceptual Landscape Plan



Source(s): Thienes Engineering, Inc. (07-12-2017)

Figure 3-8

Not to Scale

Conceptual Water and Sewer Plan

C. *Stormwater Drainage Infrastructure Improvements*

The Project's stormwater drainage system is depicted on Figure 3-9, *Conceptual Drainage Plan*. The Project's on-site stormwater drainage system would consist of catch basins, underground storm drain pipes, an underground infiltration basin, and a detention basin (located in the southeast corner of the Project site). The system is designed to collect, treat, and/or temporarily detain on-site stormwater runoff before discharging treated flows off-site. Specifically, "first flush" flows (i.e., typically the first ¾-inch of initial surface runoff after a rainstorm, which contains the highest proportion of waterborne pollution) would be diverted into the underground infiltration basin and the detention basin. The stormwater captured in the underground infiltration basin would percolate through the soil thereby minimizing the volume of stormwater discharged off-site, while stormwater captured in the detention basin would be discharged from the site gradually. Stormwater runoff captured after the first flush would be discharged off-site via a proposed parkway drain that connects to the existing gutter system in Cactus Avenue. During peak storm events, stormwater would be temporarily detained – or pond – in the truck court on the north side of the building up to a maximum depth of approximately 0.65 feet.

D. *Dry Utilities*

The Project would result in the removal of eight (8) power poles – three (3) along the Project site's frontage with Slover Avenue and five (5) along the Project site's frontage with Cactus Avenue. The existing above-ground electric transmission line along Cactus Avenue would be undergrounded during Project construction. The removal of the power poles and the undergrounding of the transmission lines would be performed in coordination with Southern California Edison.

3.4.2 Construction Characteristics

The Project Applicant anticipates that the Project would be constructed over the course of approximately 11 months. As part of Project construction, all existing structures and improvements on the Project site would be demolished, the property would be prepared for construction and mass graded, and underground utility infrastructure would be installed. Next, surface materials would be poured and the proposed building would be erected, connected to the underground utility system, and painted. Lastly, fine grading would occur and landscaping and fencing/walls would be installed. Physical disturbances necessary to implement the Project are depicted on Figure 3-10, *Proposed Physical Disturbance Area*. As shown, proposed grading activities would result in physical disturbance to a total of approximately 15.0 acres (13.3 acres of on-site grading and approximately 1.7 acres of off-site disturbance for road and infrastructure improvements). No other on- or off-site physical impacts are anticipated as part of the Project.

As shown on Figure 3-11, *Conceptual Grading Plan*, earthwork activities would result in approximately 38,606 cubic yards (c.y.) of cut and 38,606 c.y. of fill. No import or export of soil materials would be required. Proposed manufactured slopes on-site (i.e., the banks of the proposed storm water detention basin) would feature a maximum incline of 3:1. A retaining wall ranging in height from six (6) to nine (9) feet would be constructed along a portion of the northern Project site boundary; however, the retaining wall would be constructed below the grade of Slover Avenue and

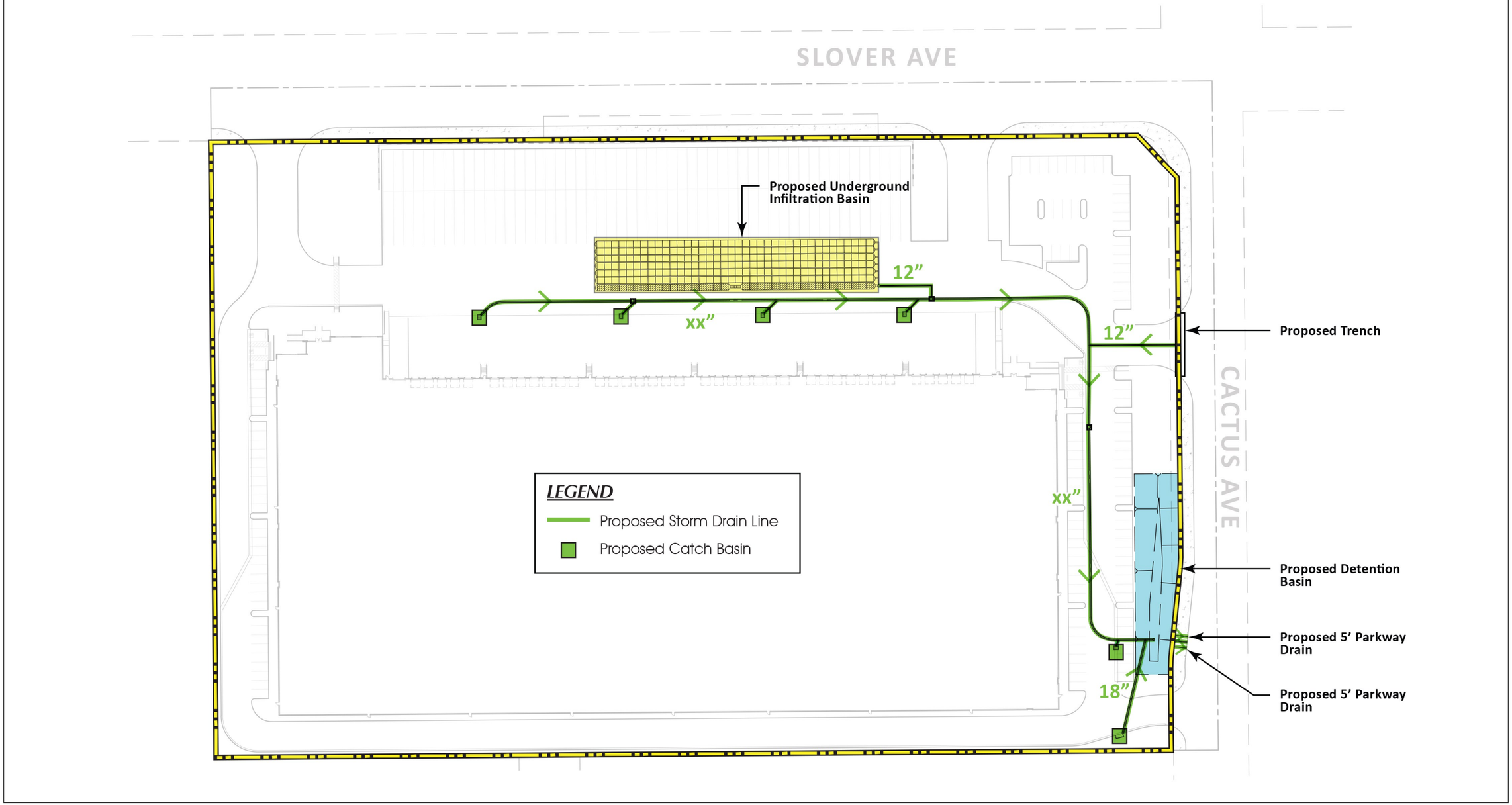
would not be visible from the Slover Avenue right-of-way (ROW). Underground utilities would be installed to a maximum depth of 10 feet below grade.

As is typical for a construction schedule for a facility such as the Project, construction equipment would generally operate on the Project site approximately eight hours per day, six days per week. Permitted hours of construction are between 7:00 a.m. to 7:00 p.m. on Mondays through Saturdays (except Federal holidays) pursuant to the County of San Bernardino Development Code (§ 83.01.080(g)). The types of heavy equipment expected to be used during construction activities are listed in Table 3-1, *Construction Equipment Assumptions*. Even though daily construction activities are permitted to occur over a 12-hour period, construction equipment is not in continual operation and some pieces of equipment are used only periodically throughout a typical day of construction. Thus, eight (8) hours of daily use per piece of equipment (approximately two-thirds of the daily period over which construction activities are allowed) is a reasonable assumption. Should construction activities need to occur at night (such as concrete pouring activities that require air temperatures to be lower than occur during the day), the Project Applicant would be required to obtain authorization for nighttime work from the County of San Bernardino.

Table 3-1 Construction Equipment Assumptions

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

Source: (Urban Crossroads, Inc., 2019a, Table 3-3)

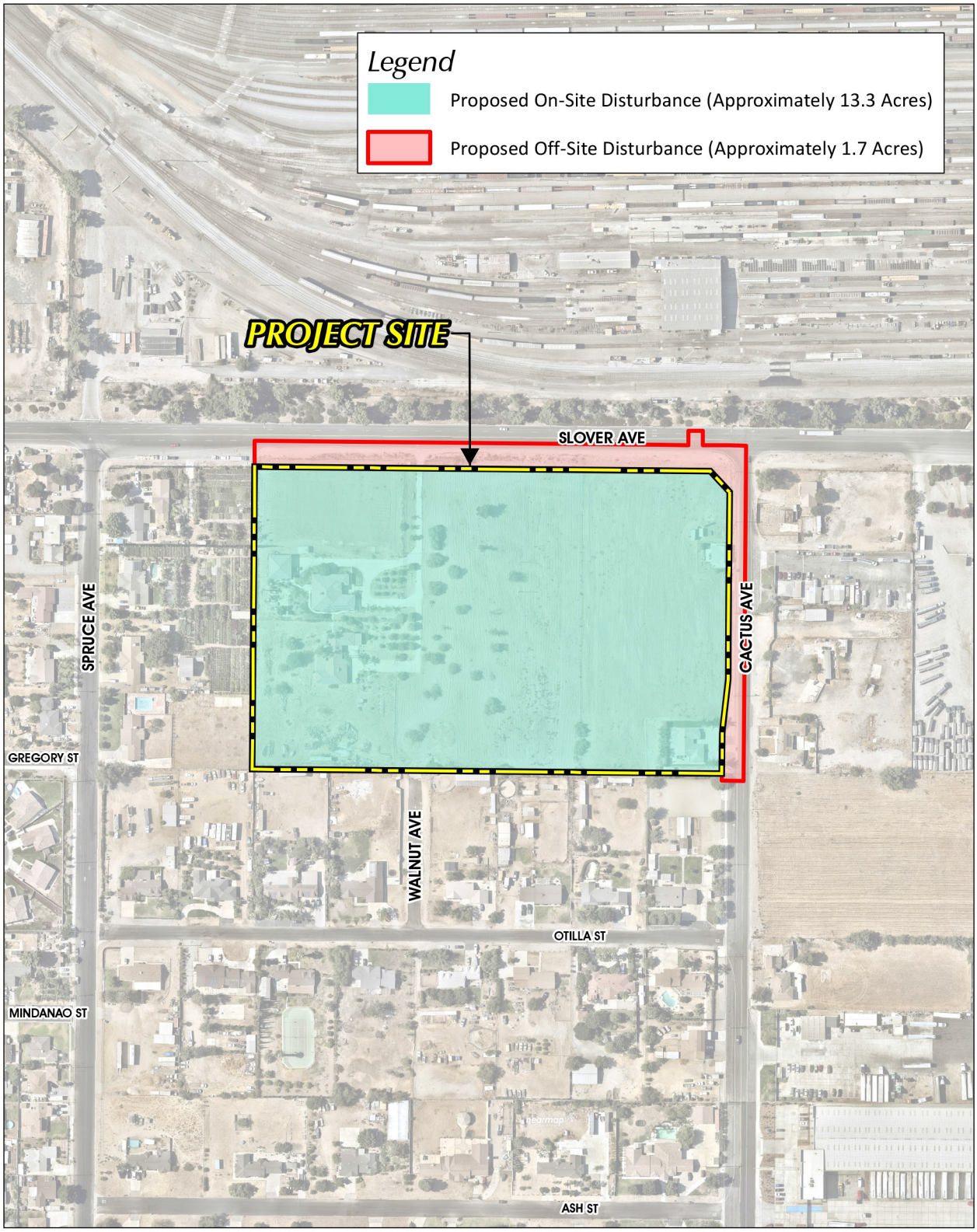


Source(s): Thienes Engineering, Inc. (07-12-2017)

Figure 3-9

Not to Scale

Conceptual Drainage Plan

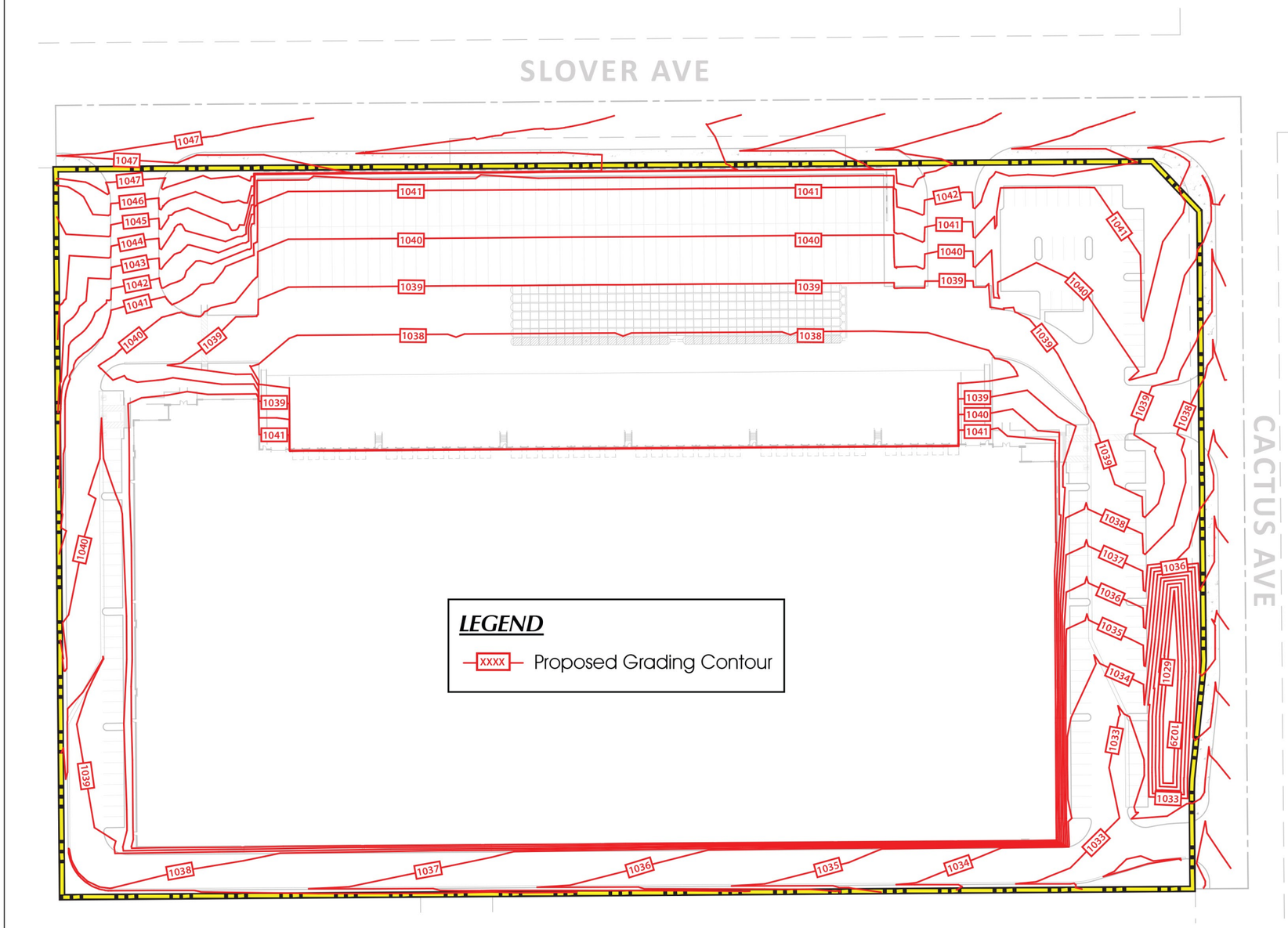


Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

Figure 3-10

0 75 150 300 Feet

Proposed Physical Disturbance Area



7/21/2017

EARTHWORK BALANCE CALCULATIONS

PROJECT: ALERE- SLOVER AND CACTUS
JOB# 3569

K.	SITE AREA:	629,624 SF
L.	SUBSIDENCE FACTOR:	0.125
M.	SHRINKAGE FACTOR:	10.0 %
N.	SITE STRIPPING FACTOR:	0.02
O.	OVEREXCAVATION:	44,569 CY
A.	CALCULATED CUT:	33,456 CY
B.	FOOTING AND UTILITY SPOILS	**3,150** CY
B1.	OFFSITE SPOILS (STREET AND STORM DRAIN)	**2,000**
C.	**TOTAL CUT: (A+B)**	**38,606** CY
D.	CALCULATED FILL:	26,907 CY
E.	LIGHT PAVING FILL:	- CY
F.	SUBSIDENCE: (LxK)/27=	2,915 CY
G.	SHRINKAGE: (M/100)C=	3,861 CY
H.	SITE STRIPPING	466
I.	OVEREXCAVATION SHRINKAGE	4,457 CY
J.	**TOTAL FILL: (D+E+F+G+H)=**	**38,606** CY
K.	**TOTAL (IMPORT) OR EXPORT:**	**0** CY
	SITE ADJUSTMENT	0.00

Source(s): Thienes Engineering, Inc. (07-21-2017)

Figure 3-11

Not to Scale

Conceptual Grading Plan

3.4.3 OPERATIONAL CHARACTERISTICS

At the time this EIR was prepared, the future occupant(s) of the Project's building was unknown. The Project Applicant expects that the building would be occupied by warehouse distribution operators; the building is not designed to accommodate any warehouse cold storage or refrigerated uses. For purposes of evaluation in 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. Lighting would be subject to compliance with San Bernardino County Development Code § 83.07.030, which states that exterior lighting shall be fully-shielded to preclude light pollution or light trespass on abutting residential land uses and public rights-of-way.

The building is designed such that business operations would be conducted within the enclosed building, with the exception of traffic movement, parking, and the loading and unloading of tractor trailers at designated loading bays. The outdoor cargo handling equipment used during loading, and unloading of trailers (e.g., yard trucks, hostlers, yard goats, pallet jacks, forklifts) is expected to be non-diesel powered per contemporary industry standards. As a practical matter, dock doors on warehouse buildings are not occupied by a truck at all times of the day. There are typically many more dock door positions on warehouse buildings than are needed for receiving and shipping volumes. The dock doors that are in use at any given time are usually selected based on interior building operation efficiencies. In other words, trucks dock in the position closest to where the goods carried by the truck are stored inside the warehouse. As a result, many dock door positions are frequently inactive throughout the day. Pursuant to State law, on-road diesel-fueled trucks are required to comply with various air quality and greenhouse gas emission standards, including but not limited to the type of fuel used, engine model year stipulations, aerodynamic features, and idling time restrictions. Compliance with State law is mandatory and inspections of on-road diesel trucks subject to applicable State laws are conducted by the California Air Resources Board (CARB).

During long-term operating conditions, employees, visitors, and vehicles hauling goods will travel to and from the Project site on a daily basis. Using the trip generation rates given in the Institute of Transportation Engineers (ITE) Trip Generation Manual (10^{th} Edition), the Project is calculated to generate approximately 449 total vehicle trips on a daily basis, including 359 daily passenger vehicle trips (actual trips) and 90 daily truck trips (actual trips) (Urban Crossroads, 2019g, Table 4-2). Based on standard WVWD water demand rates for industrial warehouse/distribution land uses of 2,000 gallons of water per acre per day, the Project is estimated to result in a demand for approximately 26,600 gallons of water per day (WVWD, 2012, p. 5-3). The Project also is conservatively estimated to result in a demand for approximately 26,600 gallons of wastewater per day. (This estimate mirrors the Project water demand and is conservative because Project water use includes landscape irrigation, which does not flow into the sewer system or require wastewater treatment.) Based on calculations from the Project's energy report (EIR *Technical Appendix E*), the Project's energy use is estimated at approximately 656,418 kilowatt hours (kWh) per year, and natural gas usage is estimated at approximately 523,446 thousand British thermal units per year (kBTU/yr). (Urban Crossroads, 2019d, Table 4-12)

3.5 SUMMARY OF REQUESTED ACTIONS

The County of San Bernardino has primary approval responsibility for the proposed Project. As such, the City serves as the Lead Agency for this EIR pursuant to CEQA Guidelines § 15050. The County's Planning Commission will evaluate this EIR and the Project Applicant's requested discretionary applications (General Plan Amendment, Conditional Use Permit) and make a recommendation to the Board of Supervisors whether the Project's discretionary applications should be approved and the EIR should be certified. The Board of Supervisors is the decision-making authority for the Project and will consider the Project along with the Planning Commission's recommendations and will make a final decision to approve, approve with changes, or deny the Project. The County, including the Planning Commission and Board of Supervisors, will consider the information contained in this EIR and the Project's Administrative Record in its decision-making processes. In the event of approval of the Project and certification of its EIR, the County would conduct administrative reviews and grant ministerial permits and approvals to implement Project requirements and conditions of approval.

A list of actions under County of San Bernardino jurisdiction is provided in Table 3-2, *Matrix of Project Approvals/Permits*. In addition, additional discretionary and/or administrative actions may be necessary from other government agencies to fully implement the Project. Table 3-2 lists the government agencies that are expected to use the Project's EIR during their consultation and review of the Project and its implementing actions and provides a summary of the subsequent actions associated with the Project.

Table 3-2 Matrix of Project Approvals/Permits

Public Agency	Approvals and Decisions
County of San Bernardino	
Proposed Project – County of San Bernardino Discretionary Approvals	
County of San Bernardino Planning Commission	• Recommend approval, conditional approval, or denial of GPA (P201700564) and CUP (P201700563). • Recommend that the Board of Supervisors reject or certify this EIR along with appropriate CEQA Findings.
County of San Bernardino Board of Supervisors	• Approve, conditionally approve, or deny GPA (P201700564) and CUP (P201700563). • Reject or certify this EIR along with appropriate CEQA Findings.
Subsequent County of San Bernardino Discretionary and Ministerial Approvals	
County of San Bernardino Implementing Approvals	• Approve Final Maps, lot line adjustments, or parcel mergers, as may be appropriate. • Approve precise site plan(s) and landscaping/irrigation plan(s), as may be appropriate. • Issue Grading Permits. • Issue Building Permits. • Issue Occupancy Permits. • Approve Road Improvement Plans. • Issue Encroachment Permits. • Accept public right-of-way dedications. • Approve public right-of-way abandonments/vacations. • Approve Water Quality Management Plan (WQMP).
Other Agencies – Subsequent Approvals and Permits	
San Bernardino County Flood Control District	• Approvals for construction of storm water infrastructure and connection to municipal storm water system.
West Valley Water District	• Approvals for construction of water infrastructure and connection to water distribution system.
City of Rialto	• Administrative approvals for connections to off-site sewer infrastructure.
Santa Ana Regional Water Quality Control Board	• Issuance of a Construction Activity General Construction Permit. • Issuance of a National Pollutant Discharge Elimination System (NPDES) Permit. • Approve WQMP.
Southern California Edison	• Approve power pole removals and undergrounding of utilities.

4.0 ENVIRONMENTAL ANALYSIS

4.0.1 SUMMARY OF EIR SCOPE

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

In compliance with the procedural requirements of CEQA, an Initial Study was prepared to determine the scope of environmental analysis for this EIR. The County of San Bernardino distributed a NOP to public agencies and interested individuals and posted the NOP on its website to solicit input on the scope of study for the EIR. The County of San Bernardino also held an EIR Scoping Meeting to solicit input from the general public on the scope of study for the EIR. Taking all known information and public comments into consideration, 14 primary environmental subject areas are evaluated in detail in this Section 4.0, as listed below. Each subsection evaluates several specific topics related to the primary environmental subject. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

4.1	Aesthetics	4.8	Hazards and Hazardous Materials
4.2	Air Quality	4.9	Hydrology and Water Quality
4.3	Biological Resources	4.10	Land Use and Planning
4.4	Cultural Resources	4.11	Noise
4.5	Energy	4.12	Transportation
4.6	Geology and Soils	4.13	Tribal Cultural Resources
4.7	Greenhouse Gas Emissions	4.14	Utilities and Service Systems

As concluded by the Project's Initial Study (included in *Technical Appendix A* to this EIR) and after consideration of all comments received by the County on the scope of this EIR and documented in the County's administrative record, six (6) environmental subjects were determined by the County to have clearly no potential to be significantly impacted by the Project: Agriculture and Forestry Resources, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. These six subjects are discussed briefly 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 § 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 § 15130(a)(1)). As defined in CEQA Guidelines § 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 § 15130(b) describes two acceptable methods for 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 traffic impacts and vehicular-related air quality, greenhouse gas, and noise impacts. The analysis of cumulative traffic impacts combines the summary of projections approach with the manual addition of known past, present, and reasonably foreseeable projects. The County of San Bernardino determined this approach to be appropriate because long-range planning documents contain a sufficient amount of information to enable an analysis of cumulative effect for all subject areas, with expectation of traffic (and vehicular-related air quality, greenhouse gas, and noise effects), which requires a greater level of detailed study. The cumulative impact analyses of vehicular-related air quality, greenhouse gas, and noise impacts, which rely on data from the Project's traffic study, inherently utilize the combined approach. With the combined approach, the cumulative impact analyses for the air quality, greenhouse gas, noise, and traffic issue areas overstate the Project's potential cumulative 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 cumulative air quality, greenhouse gas, noise, and traffic impacts.

The list of projects used to supplement the summary of projections approach for the cumulative traffic impact analysis (as well as vehicular-related air quality, greenhouse gas, and noise impact analyses) includes known approved and pending development projects in proximity to the Project site that would contribute traffic to the same transportation facilities as the Project, as well as several large, traffic-intensive projects farther from the Project site that have the potential to affect regional transportation facilities. 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 traffic (and vehicular-related air quality, greenhouse gas, and noise impacts) includes the 21 other known past, present, and reasonably foreseeable projects in addition to the summary of projections shown in Figure 4.0-1, *Cumulative Development Location Map*, and are listed in Table 4.0-1, *Cumulative Development List of Projects Summary*.

Table 4.0-1 Cumulative Development List of Projects Summary

ID	Project Name	Land Use[1]	Quantity	Units[2]
County of San Bernardino				
SB1	NWC of Slover Av. and Locust Av.	Fast Food Restaurant With Drive-Thru	3.265	TSF
		Retail Store	7.200	TSF
		Warehouse	20.750	TSF
SB2	SEC of Linden Av. and Valley Bl.	Fast Food Restaurant	1.500	TSF
SB3	Valley Bl., West of Linden Av.	Office Building	0.250	AC
SB4	Linden Av., north of Slover Av.	Tire Store	3.000	TSF
SB5	Slover Av. between Locust Av. and Laurel Av.	High-Cube Warehouse	344.000	TSF
SB6	Locust Av. and 7th St.	SFDR	198	DU
SB7	NEC and NWC of Cedar Av. and Orange St.	Warehouse	395.000	TSF
SB8	NWC of Cedar Av. and Jurupa Av.	High-Cube Warehouse	677.000	TSF
SB9	West of Agua Mansa Rd. and North of El Rivino Rd.	High-Cube Warehouse	476.000	TSF
		Warehouse	30.000	TSF
SB10	Holly Street Truck Terminal	Truck Terminal	450.000	TSF
City of Fontana				
F1	West Valley Logistics Center	High-Cube Transload & Short-Term Storage	3183.100	TSF
		Warehouse	290.590	TSF
City of Rialto				
RIA1	Panattoni I-10 (Cactus Av. & El Rivino Rd.)	Warehouse	2,475.745	TSF
RIA2	CapRock III	Warehouse	582.000	TSF
RIA3	Newmark Merrill Companies	Discount Super Store	198.000	TSF
		Tire Store	9.861	TSF
		Retail	25.436	TSF
		Fast Food w/ Drive-Thru	5.484	TSF
RIA4	Kore Infrastructure	Biosolids Facility	288	TPD
City of Colton				
COL1	2036 Miguel Bustamante Pkwy.	Warehouse	124.588	TSF
	2053 Miguel Bustamante Pkwy.	Warehouse	174.996	TSF
COL2	Roquet Ranch	SFDR	754	DU
		Condo/Townhomes	244	DU
		Active Adult - Attached	52	DU
		Shopping Center	6.500	TSF
		Coffee Shop with Drive Thru	1.500	TSF
		Fast Food with Drive Thru	4.000	TSF
		Active Park	11.1	AC
		Passive Park	8.4	AC
COL3	2163 Riverside Av.	High Cube Warehouse	447.330	TSF
City of Jurupa Valley				
JV1	Inland Empire Cold Storage	Cold Storage Facility	40.800	TSF
JV2	Agua Mansa Commerce Park Specific Plan	High-Cube Warehouse	4277.000	TSF
		General Light Industrial	150.000	TSF
		Commercial Retail	25.000	TSF

[1] SFDR = Single Family Detached Residential

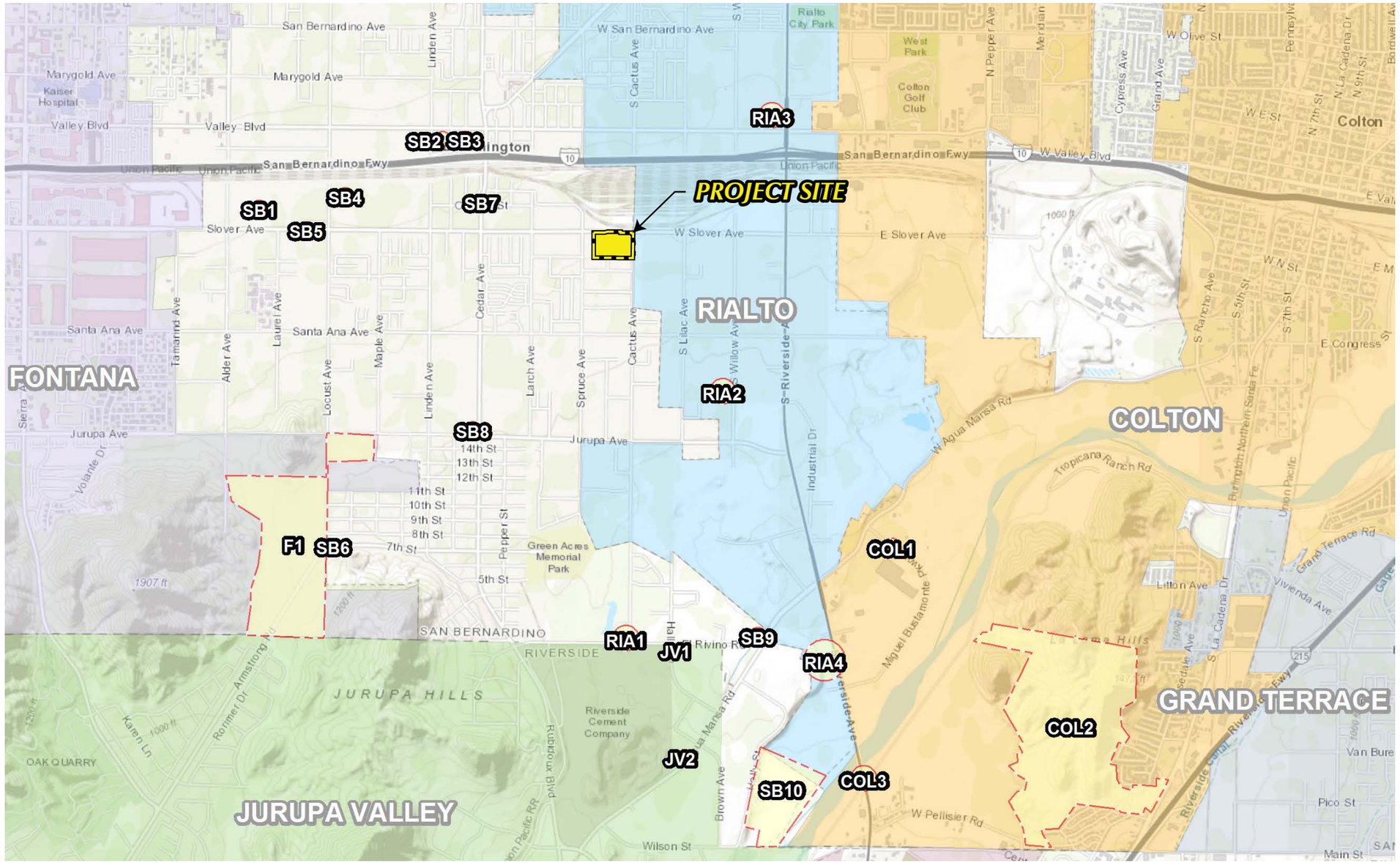
[2] DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students; AC = Acres; TPD = Tons Per Day; VFP = Vehicle Fueling Positions

Source: (Urban Crossroads, 2019g, Table 4-3)

For the cumulative impact analyses that rely on the summary projections approach (i.e., all issue areas with the exception of traffic and vehicular-related air quality, greenhouse gas, and noise – as described in the preceding pages), the cumulative study area primarily includes the unincorporated community of Bloomington, City of Fontana, City of Rialto, City of Colton, and the City of Jurupa Valley. These jurisdictions encompass the southwestern area of San Bernardino County and northwestern area of Riverside County, and have similar environmental characteristics as the Project area. The selected study area encompasses the central San Bernardino Valley, which is largely bounded by prominent topographic landforms, such as the San Gabriel Mountains and San Bernardino Mountains to the north, the San Jacinto Mountains to the east, the Temescal Mountains and Santa Ana Mountains to the south, and the Pomona Valley to the west. This study area exhibits similar characteristics in terms of climate, geology, and hydrology and, therefore, is likely to also have similar biological, archaeological, and tribal cultural resource characteristics as well. This study area also encompasses the service areas of the Project site's primary public service and utility providers. Areas outside of this study area either exhibit topographic, climatological, or other environmental circumstances that differ from those of the Project area, or are simply too far from the proposed Project site to produce environmental effects that could be cumulatively-considerable when considered together with the Project's impacts. Exceptions include the cumulative air quality analysis, which considers the entire South Coast Air Basin (SCAB); the greenhouse gas emissions and global climate change analysis, which affects all areas on the planet; and the analysis of potential cumulative hydrology and water quality effects, which considers other development projects located within the Santa Ana River Basin watershed.

Environmental impacts associated with buildout of the Project cumulative study area were evaluated in CEQA compliance documents prepared for the respective General Plans of each of the above-named jurisdictions. The location where each of these CEQA compliance documents is available for review is provided below. All of the CEQA compliance documents listed below are herein incorporated by reference pursuant to CEQA Guidelines § 15150.

- County of San Bernardino General Plan EIR (SCH No. 2005101038), available for review at the County of San Bernardino Land Use Services Department – Planning Division 385 North Arrowhead Avenue, 1st Floor San Bernardino, CA 92415-0182;
- City of Fontana General Plan EIR (SCH No. 2003031083), available for review at the City of Fontana Planning Department, 8353 Sierra Avenue Fontana, CA 92335;
- City of Rialto General Plan EIR (SCH No. 2008071100), available for review at the City of Rialto Planning Division, 150 S. Palm Avenue Rialto, CA 92376;
- City of Colton General Plan EIR (SCH No. 2012031037), available for review at the City of Colton Development Services Department, 659 North La Cadena Drive, Colton, CA 92324; and
- County of Jurupa Valley General Plan Draft EIR (SCH No. 2016021025), available for review at the City of Jurupa Valley Planning Department, 8930 Limonite Avenue Jurupa Valley, California 92509.



Source(s): Urban Crossroads (04-12-2019)

Figure 4.0-1

Not to Scale

Cumulative Development Location Map

4.0.3 IDENTIFICATION OF IMPACTS

Subsections 4.1 through 4.14 of this EIR evaluate the 14 environmental subjects warranting detailed analysis as determined by this EIR's Initial Study and in consideration of public comments. 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 presented in CEQA Guidelines Appendix G and as applied by the County of San Bernardino. 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, is significant, or is less than significant.

Serving as the CEQA Lead Agency for this EIR, the County 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 County of San Bernardino, taking into consideration CEQA Guidelines Appendix G, the County of San Bernardino General Plan, the County of San Bernardino's Municipal Code and adopted County 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 § 15126.2(a), Project-related effects on the environment are characterized in this EIR as direct, indirect, cumulative, 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 County of San Bernardino would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines § 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 AESTHETICS

This Subsection describes the aesthetic qualities and potential visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing aesthetic/visual conditions are based, in part, on field observations and site photographs collected by T&B Planning, Inc. in February 2019 (T&B Planning, 2019), analysis of aerial photography (Google Earth Pro, 2019), and the Project application materials submitted to the County of San Bernardino described in Section 3.0, *Project Description*, of this EIR. This Subsection also is based on information contained in the Open Space Element and Conservation Element of the County of San Bernardino General Plan (County of San Bernardino, 2014), the Aesthetics section of the certified Final EIR prepared for the County's General Plan Program EIR (SCH No. 2005101038) (County of San Bernardino, 2007), the County of San Bernardino Development Code (County of San Bernardino, 2018a), and the California Department of Transportation (Caltrans) Scenic Highway Mapping System (Caltrans, 2018). All references used in this Subsection are listed in EIR Section 7.0, *References*.

4.1.1 EXISTING CONDITIONS

A. Project Site and Surrounding Area

The Project site encompasses approximately 13.3 acres in the unincorporated San Bernardino County community of Bloomington. The site borders the south side of Slover Avenue and the west side of Cactus Avenue, and is located approximately 320 feet north of Otilla Street and approximately 310 feet east of Spruce Avenue (as illustrated on Figure 2-2, *Vicinity Map*). The Project site ranges in elevation from approximately 1,030 feet above mean sea level (amsl) in the southeast portion of the site to approximately 1,045 feet amsl in the northwest portion of the Project site. The overall topographic relief of the Project site is approximately 15 feet and the site is perceived as flat from off-site viewing areas (i.e., public streets). There are no unique topographic or aesthetic features present on the property, such as rock outcroppings.

As recommended in CEQA Guidelines § 15125, the environmental conditions that existed on the Project site at the time the EIR's NOP was released for public review shall comprise the site's "existing setting." The NOP for this EIR was released on March 6, 2019. As of that approximate date, the Project site contained large expanses of undeveloped land with the exception of four (4) single-family residences located on the property: two (2) on the western portion, one (1) on the southeastern corner and one (1) on the northeastern portion of the Project site. The existing conditions of the Project site can be seen on Figure 2-5, *Aerial Photograph*.

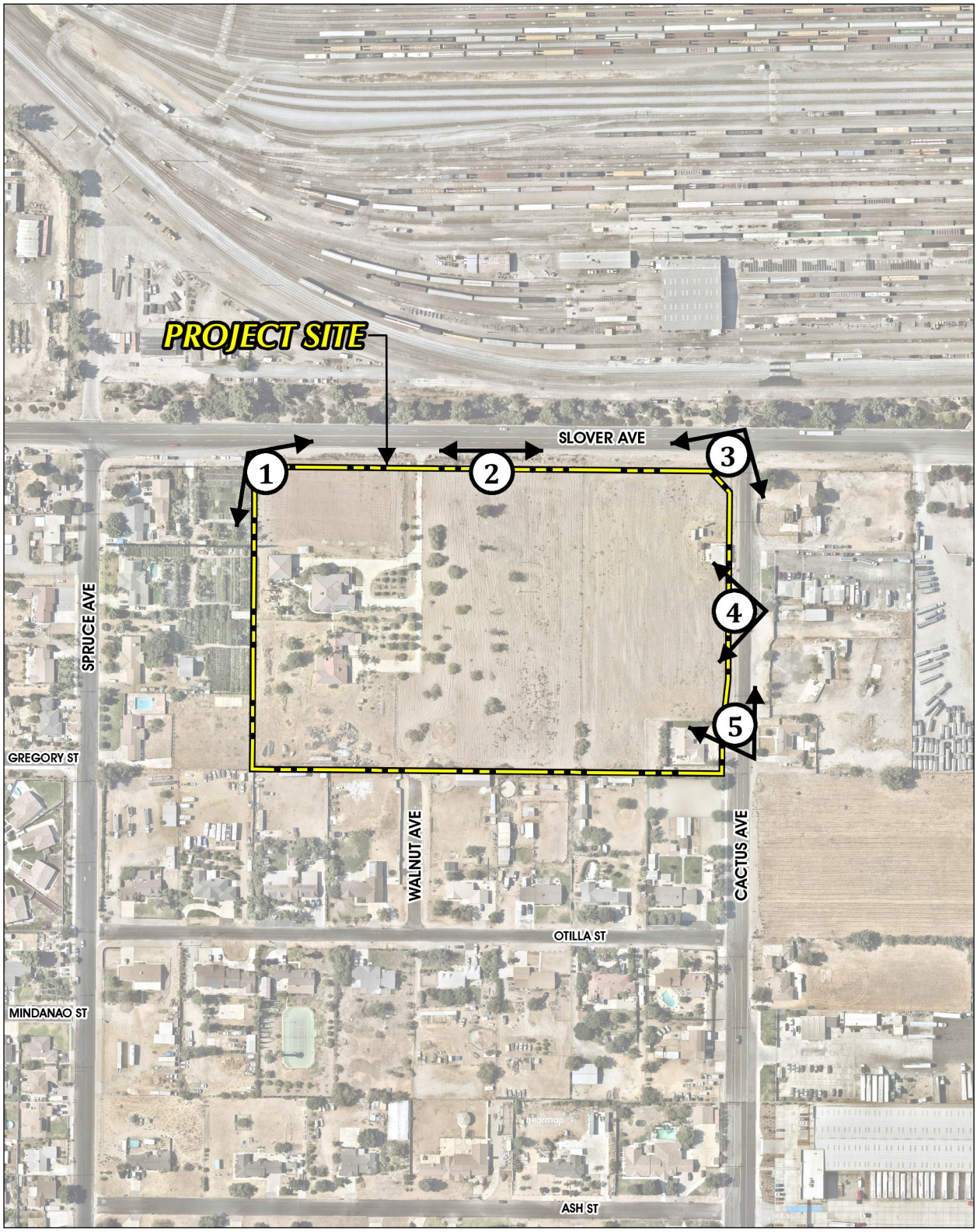
Figure 4.1-1, *Site Photograph Key Map*, illustrates the locations of the five (5) vantage points used in the photographic inventory and are relied upon herein to describe the Project site's existing aesthetic condition and character. The representative photographs taken from these vantage points are described on the following pages and illustrated on Figure 4.1-2 and Figure 4.1-1. These photographs provide a representative visual depiction of the site's visual characteristics as seen from surrounding public viewing areas, which consist of public roads adjacent or near the Project site.

The site photographs presented on the following pages were stitched together from multiple individual photographs in order to provide wider panoramic views of the Project site and its surroundings. The photographs were all taken during the same session and reflect a field of view approximately five (5) feet above the ground. Due to the presentation of panoramic views, portions of the site photographs may appear slightly distorted.

- Site Photograph 1 (Figure 4.1-2): Site Photograph 1 provides a 90-degree view at the northwest corner of the Project site (along Slover Avenue). The left-hand side of the photograph provides a view looking toward Cactus Avenue to the east. The center of the photograph provides a view across the site looking southeast. The right-hand side of the photograph provides a view looking south. A plant nursery that borders the Project site on the west is visible on the right-hand side of the photograph. To the left (east) of the nursery is one of the single-family residences located on-site (and its detached garage). Large open areas with scattered plant materials is visible across the Project site. Visible on the background of the photograph are various off-site land uses, including residential homes located to the south of the Project site (middle portion of photograph), and commercial buildings located east of the Project site (left-hand portion of photograph). The La Loma Hills are visible on the horizon from this vantage point.

- Site Photograph 2 (Figure 4.1-2): Site Photograph 2 provides a 180-degree view from the approximate midpoint of the Project site's northern boundary, looking directly south, and best illustrates the change in grade between Slover Avenue and the Project site (the site is lower than the roadway). The foreground of the photograph best represents the large expanses of open, undeveloped land on the Project site. The foreground of the photograph primarily depicts the weedy vegetation located on the site; but, also depicts several man-made features, including a chain-link fence and an out-of-service irrigation standpipe. One of the on-site residences (and its associated outbuilding and vehicle trailers) is visible in the mid-ground on the left-hand side of the photograph (eastern portion of the property). The two residences on the western portion of the property are visible on the right-hand side of the photograph, although partially obscured by on-site trees. Existing residences that abut the Project site on the south are visible along the horizon line. The La Loma Hills and the Jurupa Hills are partially visible from this vantage point, although mostly obscured by existing, off-site residential development and landscaping.

- Site Photograph 3 (Figure 4.1-2): Site Photograph 3 provides a 90-degree view of the Project site from the Slover Avenue/Cactus Avenue intersection. The left-hand portion of the photograph provides a view of the Project site's eastern boundary. The center of the photograph provides a view across the Project site, looking southwest to west. The right-hand side of the photograph provides a view along the site's northern boundary, abutting Slover Avenue. The existing residence at the northeast corner of the Project site (and its associated outbuildings and vehicle trailers) is clearly visible in the mid-ground of the photograph, as are numerous power poles and overhead powerlines along Cactus Avenue. The Jurupa Hills are visible along the horizon of the center and right-hand side of the photograph.



Source(s): ESRI, Nearmap Aerial (2018), SANBAG (2017)

Figure 4.1-1

0 75 150 300 Feet

Site Photograph Key Map

Northeast

Southwest

Site Photograph 1: From Northeast Corner of the Project Site, along Slover Ave, looking Northeast to Southwest.

East

West

Site Photograph 2: From Northern Edge of the Project Site, along Slover Ave, looking East to West.

Southeast

Southwest

Site Photograph 3: Northeast of the Project Site, at the Intersection of Slover Ave & Cactus Ave, looking Southeast to Southwest.

Figure 4.1-2

Not to Scale

Site Photographs 1-3

- Site Photograph 4 (Figure 4.1-1): Site Photograph 4 provides a 180-degree view of the Project site from Cactus Avenue, at the southeast corner of the Project site, looking northwest. From this vantage point, the Project site is characterized as flat land with some scattered weedy vegetation along with ornamental trees. All four (4) residences on the Project site are visible in this photograph: one (1) on the left-hand side of the photograph (southeast corner of the site); two (2) in the central portion of the site, although partially obscured by trees (western portion of the site); and one (1) on the right-hand portion of the photograph (northeast corner of the site). Cucamonga Peak and the San Gabriel Mountains are visible in the background of the photograph.

- Site Photograph 5 (Figure 4.1-1): Site Photograph 5 provides a view, looking north, from Walnut Avenue that dead-ends at the Project site's southern boundary. At this vantage point, it is apparent that the Project site is raised slightly above off-site properties to the south. The two (2) residences on the western portion of the site are visible on the left-hand portion of the photograph, beyond the fence line. On-site vegetation (trees and shrubs) largely obscures visibility of the Project site from this vantage point. The San Gabriel Mountains are partially visible along the horizon in the background of the photograph. As part of the Project, the public right-of-way at this vantage point would be vacated and this location would become private property.

B. Scenic Resources and Scenic Vistas

The Project site is located within a relatively flat valley floor surrounded by rugged hills and mountains. Policy OS 5.1 of the County of San Bernardino General Plan Open Space Element establishes the following criteria for designation of features as scenic resources:

a. A roadway, vista point, or area that provides a vista of undisturbed natural areas.
b. Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed (the area within the field of view of the observer).
c. Offers a distant vista that provides relief from less attractive views of nearby features (such as views of mountain backdrops from urban areas). (County of San Bernardino, 2014, pp. IV-12 through IV-13)

Based on the above criteria for designation of features as scenic resources that is established in Policy OS 5.1 of the County of San Bernardino General Plan Open Space Element, potential scenic resources in the Project area include the views of the San Gabriel Mountains to the north; views of the San Bernardino Mountains, Box Spring Mountains, the Badlands, and La Loma Hills to the east; views of the Puente Hills and Chino Hills to the west; and views of the Jurupa Hills and Santa Ana Mountains to the south. Due to the heights of these landform features, they are visible along the horizon from most locations within the San Bernardino Valley.

Under existing conditions, the Project site consists of developed/disturbed vacant land that contains four (4) residences and associated outbuildings. The Project area is predominantly characterized by residential, commercial, and industrial development, as well as significant transportation facilities

such as the Union Pacific Railyard (located immediately north of the Project site) and the I-10 Freeway (located approximately 0.3 mile to the north of the Project site). As such, the Project site does not contribute to or provide a vista of undisturbed natural areas in the immediate site vicinity. Furthermore, the Project site does not contain a unique or unusual feature (including scenic resources, such as trees of scenic value, rock outcroppings, or historic buildings [the on-site structures are considered modern construction, as discussed in more detail in EIR Subsection 4.4, *Cultural Resources*]) that comprises an important or dominant portion of the viewshed (as depicted on Figure 4.1-2 and Figure 4.1-1). (Google Earth Pro, 2019) Additionally, Chapter 82.22 of the San Bernardino County Development Code establishes the "SR" or Scenic Resources Overlay District which is intended to preserve aesthetic or scenic areas within the County. The intent of the Scenic Resources Overlay District is to provide development standards that will protect, preserve and enhance the aesthetic resources of the County, as well as to implement State and federal programs and regulations pertaining to scenic highway routes. As shown on County Zoning Map FH29A (Bloomington), the Project site is not located within a Scenic Resources Overlay District, nor is any of the land within the immediately vicinity of the Project site located within a Scenic Resources Overlay District. (County of San Bernardino, 2007, p. I-3; County of San Bernardino, 2010)

The Project site also is not located within or adjacent to an Eligible or Officially Designated State Scenic Highway corridor (Caltrans, 2018). The nearest Officially Designated Scenic Highway to the Project site is the segment of State Route 38 (SR-38) that crosses the San Bernardino Mountains at Onyx Summit, located approximately 33.7 miles to the northeast of the Project site (Caltrans, 2018; Google Earth Pro, 2019). The nearest Eligible Scenic Highway to the Project site is the segment of State Route 210/330 (SR-210 and SR-330) located between I-10 Freeway and State Route 18 (SR-18), located approximately 10.5 miles to the east (Caltrans, 2018; Google Earth Pro, 2019). Due to distance and intervening topography and development, the Project site is not visible from the segments of SR-38 or SR-210/330 that are respectively considered Officially Designated and Eligible Scenic Highways. Additionally, Policy OS 5.3 of the County of San Bernardino General Plan Open Space Element designates several scenic routes within the "Valley Region" of the County; however, these roadways are each 10+ miles from the Project site and not visible from the site due to distance and intervening topography and distance (County of San Bernardino, 2014, pp. VI-13 through VI-14; Google Earth Pro, 2019).

C. Light and Glare

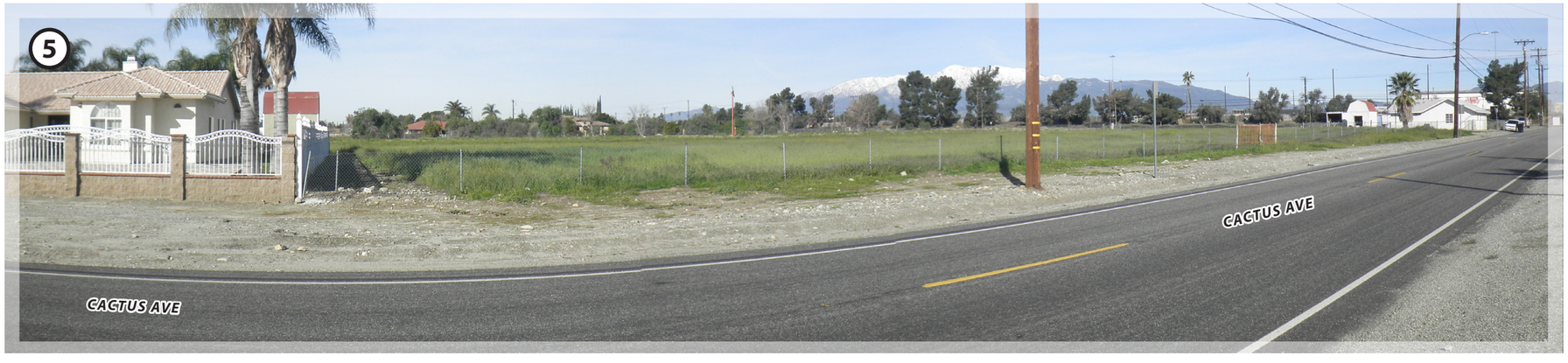
The Project site contains no sources of artificial light or glare are under existing conditions, with the exception of artificial light that is emitted from the four (4) single-family residences located on-site (including exterior mounted fixtures on residential structures and outbuildings). Artificial light sources also occur in the immediate vicinity of the Project site, with the most notable sources of light emanating from the West Colton Yard located north of Slover Avenue, street lights along Slover Avenue (on the north side of the street) and Cactus Avenue (on the west side of the street) and from headlights of vehicles traveling along Slover Avenue and Cactus Avenue.

Southwest

Northwest

Site Photograph 4: East of the Project Site, along Cactus Ave, looking Southwest to Northwest.

Northwest



North

Site Photograph 5: Southeast of the Project Site, along Cactus Ave, looking Northwest to North.

Figure 4.1-3

Not to Scale

Site Photographs 4-5

4.1.2 Applicable Environmental Plans, Policies, and Regulations

A. *Local Regulations*

1. County of San Bernardino General Plan

The County of San Bernardino General Plan guides future development within the County. The General Plan's Open Space and Conservation Elements identify goals, policies and programs that are intended to preserve the County's character and scenic resources while improving overall community design.

2. County of San Bernardino Development Code

The County of San Bernardino Development Code § 83.07.030 regulates light and glare associated with new development in the Valley Region of the County (which includes the Bloomington area and the Project site), and requires that outdoor lighting associated with commercial or industrial land uses be fully shielded to preclude light pollution or light trespass on abutting residential land use zoning districts, a residential parcel, or public right-of-way. Additionally, County of San Bernardino Development Code § 83.07.030 prohibits direct or indirect light from any light fixture from causing illumination above 0.5 foot-candles when measured at the property line of a residential land use zoning district, residential parcel, or public right-of-way. (County of San Bernardino, 2018a, § 83.07.030)

4.1.3 Basis for Determining Significance

Implementation of the Project would result in a significant aesthetic impact if the Project or any Project-related component would:

a. *Have a substantial adverse effect on a scenic vista;*

b. *Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway;*

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

d. *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects that development projects could have on aesthetics/visual quality and scenic resources. The use of these thresholds for the evaluation of Project-related impacts is intended to ensure that impacts to aesthetic resources are appropriately evaluated and that feasible mitigation measures are applied for any impacts that are determined to be significant.

Regarding the determination of significance under Threshold "a," if the Project would block or otherwise substantially and adversely affect a unique view of a scenic vista(s) as seen from a public viewing location(s), such as a public road, park, trail, and/or other publicly-owned property at which the general public is legally authorized to use or congregate, the impact will be regarded as significant. Effects to scenic vistas from private properties will not be considered significant in this EIR because the County of San Bernardino General Plan calls for the protection of public views and the County does not have any ordinances or policies in place that protect views from privately-owned property.

Regarding the determination of significance under Threshold "b," if the Project would in any way interfere with the substantial preservation and/or enhancement of scenic resources within a state scenic highway corridor or scenic resources visible from a state scenic highway then impacts would be significant.

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, regarding the determination of significance under Threshold "c," the Project would result in a significant adverse impact if the Project design conflicts with applicable zoning and other applicable regulations governing scenic quality.

Regarding the determination of significance under Threshold "d," if the Project would directly expose the Project area with bright lights or create unwanted light in the night sky including light trespass sky glow, or over-lighting, the Project would adversely affect day or nighttime views in the area.

4.1.4 IMPACT ANALYSIS

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

The representative site photographs provided on Figure 4.1-2 and Figure 4.1-1 depict the Project site under existing conditions. As shown, although the Project site contains four (4) single-family residences, the site is predominantly vacant, relatively flat land with minimal vegetative cover/landscaping. As was previously discussed under EIR Subsection 4.1.1B, the Project site does not contribute to a scenic vista under existing conditions and the County of San Bernardino General Plan does not identify any scenic vistas or scenic roads on the Project site or in the vicinity of the site.

Potential scenic resources visible from the Project site in the distance include the San Gabriel Mountains (approximately 9.5 miles to the north), the San Bernardino Mountains (approximately 45.6 miles to the east), Box Spring Mountains (approximately 6.0 miles to the southeast), the Badlands (39.5 miles to the southeast), La Loma Hills (approximately 2.5 miles to the southeast), the Chino Hills (approximately 20.0 miles to the west), the Jurupa Hills (approximately 2.5 miles to the

southwest) and the Santa Ana Mountains (approximately 23.0 miles to the south). Under existing conditions, views of the La Loma Hills, Jurupa Hills, and San Gabriel Mountains (including Cucamonga Peak) are available from the Project site and its vicinity on clear days.

The Project would involve the construction and operation of one (1) warehouse structure on the Project site with a maximum height of approximately 45 feet above finished floor. Other vertical features (walls, fences, light poles, landscaping, etc.) would be shorter and have substantially less physical mass than the building, so the 45-foot-high building is considered to have the greatest potential to affect a scenic vista. The Project's proposed warehouse building would be set back from Slover Avenue by approximately 140 feet and would be approximately 10 feet below the existing grade of Slover Avenue thereby lowering the perceived height of the building from viewpoints along Slover Avenue. The proposed warehouse building also would be set back from Cactus Avenue by 93 feet. These roadways are the main existing public viewing areas that have the potential to be substantially affected by the Project. At a maximum height of 45 feet, the proposed warehouse building would not be so tall as to obstruct public views or otherwise substantially detract from public views of the surrounding topographic features and landforms, including the San Gabriel Mountains, Jurupa Hills, and La Loma Hills, which due to the heights of these landform features ranging from approximately 860 feet to the 2,217 feet at their highest elevations and distances from the Project site, would still be visible along and above the horizon. Additionally, the proposed warehouse building's setback distances from Slover Avenue and Cactus Avenue would ensure that the lines of sight are maintained over the building from these public roads to the surrounding hills and mountains. As such, the Project would not have a substantial adverse effect on views of these scenic resources and impacts would be less than significant.

Based on the foregoing analysis, the Project would not have a substantial adverse effect on scenic vistas, and 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?***

The Project site is not located within or adjacent to a County-designated scenic roadway corridor and does not contain scenic resources, such as trees of scenic value, rock outcroppings, or historic buildings. The Project site is not located within a County Scenic Resources Overlay District, nor is any of the land within the immediately vicinity of the Project site located within a Scenic Resources Overlay District (County of San Bernardino, 2010). Furthermore, the Project site is not located within or near an Officially Designated or Eligible State Scenic Highway and, due to intervening topography and development, the Project site is not visible from an Eligible or Officially Designated State Scenic Highway (Caltrans, 2018). Accordingly, implementation of the Project would not adversely impact the viewshed within a scenic highway corridor and there is no potential for the Project to damage important scenic resources within a scenic highway corridor, including trees, rock outcroppings, and historic buildings.

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

The Project site is located in an urbanized area. The Project's design, including site layout, architecture, and landscaping is discussed and illustrated in detail in EIR Section 3.0, *Project Description*. As previously described, the Project's architecture incorporates a neutral color palette that would not be visually offensive and also incorporates accent elements, such as colored glass and decorative building elements at the building's office entries for visual interest. Additionally, the Project's landscape plan incorporates low water need plant species that can maintain vibrancy during drought conditions. The proposed visual features of the Project would ensure a high-quality aesthetic for the site. The County of San Bernardino reviewed the Project proposal in detail and determined that no component of the Project would conflict with applicable design regulations involving building architecture, landscaping, infrastructure, and road system design standards within the San Bernardino County Development Code and no impact would occur.

Threshold d: ***Would the Project create a new source of substantial light of glare, which would adversely affect daytime or nighttime view of the area?***

The proposed Project would include exterior lighting ancillary to the proposed warehouse building. The proposed Project would be required to adhere to the lighting requirements as set forth in the County of San Bernardino Development Code. The Development Code lighting standards govern the placement and design of outdoor lighting fixtures to ensure adequate lighting for public safety while also minimizing light pollution and glare and precluding public nuisances. The Project's mandatory compliance with the County of San Bernardino Development Code would ensure that the Project would not produce a new source of substantial light or glare from artificial lighting sources that would adversely affect day or nighttime views in the area. The proposed Project would involve the construction of one (1) warehouse building with exterior building surfaces that consist of concrete tilt-up panels and blue/green glass. While window glazing has a potential to result in minor glare effects, such effects would not adversely affect daytime views of any surrounding properties, including motorists on adjacent roadways, because the glass used by the Project would be low-reflective. Areas proposed for window glazing would be limited, as shown on the Project's application materials on file with the County of San Bernardino (HPA, 2018). Accordingly, a less-than-significant daytime glare impact would occur.

In conclusion, the proposed Project would introduce new sources of artificial light and glare to the Project site, but these sources would not result in the production of substantial light or glare, and would not adversely affect daytime or nighttime views of the area. Impacts would be less than significant.

4.1.5 Cumulative Impact Analysis

As noted under the discussion of Threshold "a," the Project site is relatively flat and does not contribute to any prominent scenic vistas under existing conditions. Although views of the surrounding hills and mountains are available in the Project area; such views are available throughout the cumulative study area and are not unique to the Project site's vicinity. Furthermore, development in the cumulative study area would be required to comply with the applicable policies of governing General Plans and Municipal Codes, which include policies and regulations to preserve vistas to important, designated scenic resources. Accordingly, with buildout of the proposed Project and other developments within the Project's viewshed, impacts to scenic vistas would not be cumulatively significant and the Project's contributions would be less than cumulatively-considerable.

As noted under the analysis of Threshold "b," the Project site is not located within close proximity to any designated scenic routes and does not contain any scenic resources. Therefore, the proposed Project has no potential contribute to a cumulatively significant impact to scenic resources within a designated scenic route corridor.

The Project would not conflict with applicable design regulations within the San Bernardino County Development Code and, therefore, has no potential to contribute to cumulatively considerable scenic quality impacts. Furthermore, any new development in the surrounding area would be subject to applicable development regulations and design standards imposed by the governing jurisdiction, which would ensure that development incorporates high quality building materials, architectural design, and landscaping to avoid potential adverse effects to local scenic quality.

With respect to potential cumulative light and glare impacts, the Project would be required to comply with County of San Bernardino Development Code § 83.07.030, which set standards for exterior lighting/fixtures. Any development project in the cumulative study area would be required to comply with the light reduction requirements applicable in their respective jurisdiction. Although cumulative development in the Project's surrounding area is expected to introduce new sources of artificial lighting and potentially reflective materials, the required compliance with the applicable municipal code requirements would ensure that future cumulative development does not introduce substantial sources of artificial lighting or glare. As such, the Project would not contribute to cumulatively-considerable, adverse impacts to the existing daytime or nighttime views of the Project site or its surroundings.

4.1.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project site does not comprise all or part of a scenic vista and does not contain any visually prominent scenic features. No unique views to scenic vistas are visible from the property. The Project would not substantially change a scenic view or substantially block or obscure a scenic vista; therefore, impacts to scenic vistas would be less than significant.

Threshold b: No Impact. The Project site is not located within the viewshed of a scenic highway and, therefore, the Project site does not contain any scenic resources visible from a scenic highway.

Threshold c: No Impact. The Project would not conflict with applicable design regulations contained in the San Bernardino County Development Code.

Threshold d: Less-than-Significant Impact. The Project would not create substantial light or glare. Compliance with County of San Bernardino Development Code requirements for artificial lighting would ensure less-than-significant impacts associated with light and glare affecting day or nighttime views in the area.

4.1.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.2 AIR QUALITY

This Subsection is based primarily on three 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, an air quality impact analysis, is titled "Slover and Cactus Warehouse Air Quality Impact Analysis," dated April 26, 2019, and is included as *Technical Appendix B1* to this EIR (Urban Crossroads, 2019a). The second report, a mobile source health risk assessment, is titled "Slover and Cactus Warehouse Mobile Source Health Risk Assessment," dated April 26, 2019, and is included as *Technical Appendix B2* to this EIR (Urban Crossroads, 2019b). The last report, titled "Slover and Cactus Warehouse Supplemental Air Quality Assessment" and dated April 26, 2019, is included as *Technical Appendix B3* to this EIR (Urban Crossroads, 2019c). Refer to Section 7.0, *References*, for a complete list of reference sources used in this Subsection.

4.2.1 EXISTING CONDITIONS

A. *Atmospheric Setting*

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 SCAB encompasses approximately 6,745 square miles and 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, and the San Jacinto Mountains to the north and east, respectively; and the San Diego County line to the south. (Urban Crossroads, 2019a, p. 8)

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. (Urban Crossroads, 2019a, p. 8)

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. (Urban Crossroads, 2019a, p. 9)

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. (Urban Crossroads, 2019a, p. 9)

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 of 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. (Urban Crossroads, 2019a, p. 9)

C. *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 (refer also to Section 2.6 of *Technical Appendix B1*).

- **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. 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. (Urban Crossroads, 2019a, pp. 10, 12)

- **Sulfur Dioxide (SO_2)** is a colorless gas or liquid. SO_2 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_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X). SO_2 is a respiratory irritant to people afflicted with asthma. After a few minutes' exposure to low levels of SO_2, 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_2 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. (Urban Crossroads, 2019a, pp. 10, 13)

- **Nitrogen Oxides (NO_X)** consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with oxygen (O_2). 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_2 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_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 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_2. Short-term exposure to NO_2 can result in resistance to air flow and airway contraction in healthy subjects. Exposure to NO_2 can result decreases in lung functions in individuals with asthma or chronic obstructive pulmonary diseases (e.g., chronic bronchitis, emphysema), as these individuals are more susceptible to the effects of NO_X than healthy individuals. (Urban Crossroads, 2019a, pp. 10, 13)

- **Ozone (O_3)** is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X), 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. 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. (Urban Crossroads, 2019a, pp. 10-12)

- **Particulate Matter less than 10 microns (PM_{10}) and less than 2.5 microns ($PM_{2.5}$)** 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_2 release from power plants and industrial facilities and nitrates that are formed from NO_X 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_{10} and $PM_{2.5}$ allows them to enter the lungs where they may be deposited, resulting in adverse health effects. Elevated ambient concentrations of fine particulate matter (PM_{10} and $PM_{2.5}$) have been linked to an increase in 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 $PM_{2.5}$ 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_{10} and $PM_{2.5}$. (Urban Crossroads, 2019a, pp. 10-13)

- **Volatile Organic Compounds (VOCs) and Reactive Organic Gasses (ROG)** 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, which can reduce respiratory volume. In addition, 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. (Urban Crossroads, 2019a, pp. 11, 14)

- **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. As a result of the removal of lead from gasoline, ambient levels of lead have not exceeded applicable air quality standards at any of the SCAQMD's regular air quality monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. 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. Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. (Urban Crossroads, 2019a, pp. 11, 13-14)

D. 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 4.2-1, *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 presented in Table 4.2-1.

Table 4.2-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: (Urban Crossroads, 2019a, Table 2-1)

1. Regional Air Quality

❑ Criteria Pollutants

The SCAQMD monitors levels of various criteria pollutants at 37 monitoring stations and five (5) single-pollutant source lead monitoring sites throughout the SCAB. The attainment status for criteria pollutants within the SCAB is summarized in Table 4.2-2, *SCAB Criteria Pollutant Attainment Status*.

Table 4.2-2 SCAB Criteria Pollutant Attainment Status

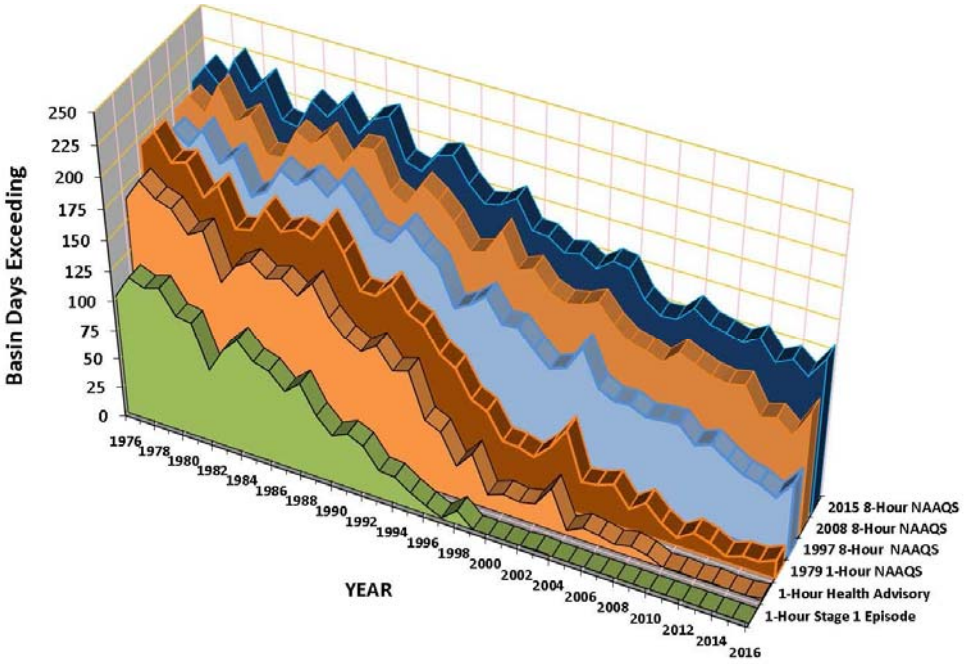
Criteria Pollutant	State Designation	Federal Designation
Ozone ,1-hour standard	Nonattainment	--
Ozone, 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Unclassifiable/Attainment	Unclassifiable/Attainment
Lead[1]	Attainment	Unclassifiable/Attainment

State/Federal designations were taken from http://www.arb.ca.gov/desig/adm/adm.htm
Source: (Urban Crossroads, 2019a, Table 2-2)

As a result of the region's air pollution control efforts over the last 60+ years, criteria pollutant concentrations in the SCAB have reduced dramatically and are expected to continue to improve in the future as State regulations become more stringent (Urban Crossroads, 2019a, pp. 21-22). Criteria pollutant trends within the SCAB are illustrated on the graphs presented on the following pages and described in detail in Section 2.8 of *Technical Appendix B1*.

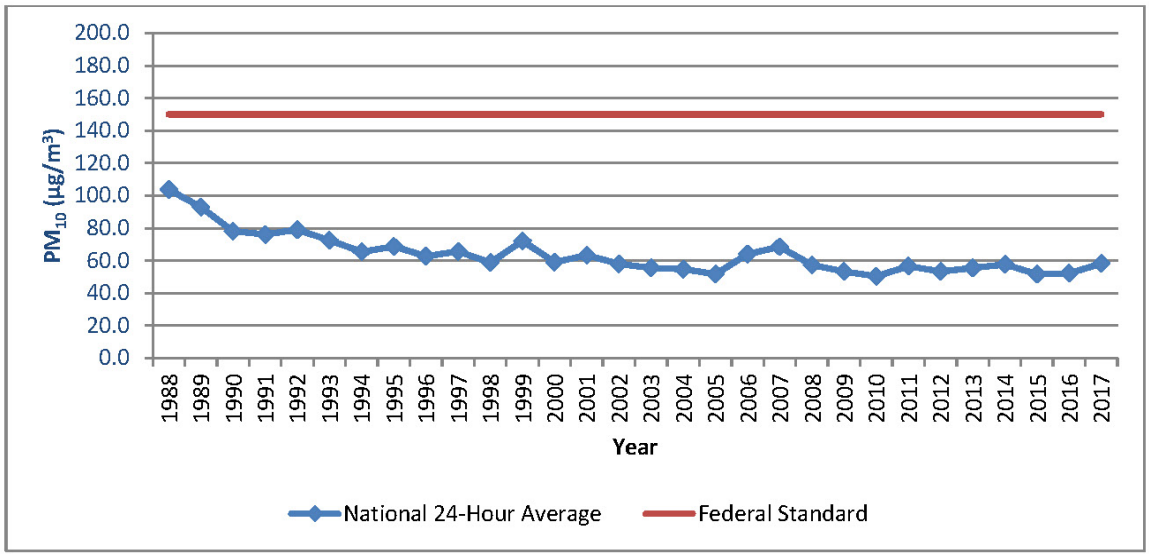
[1]In 2015, the Los Angeles County portion of the SCAB exceeded applicable federal lead standards; however, all other portions of the SCAB – including the portion of the SCAB where the Project site is located – did not exceed federal lead standards.

South Coast Air Basin Ozone Trend



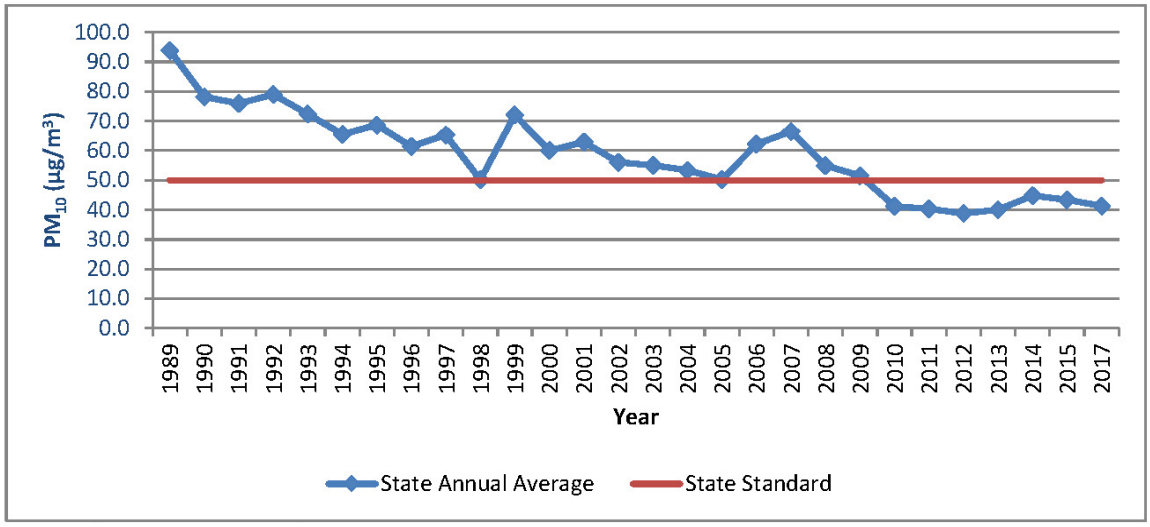
Source: (Urban Crossroads, 2019a, Table 2-4)

South Coast Air Basin PM_{10} Trend (Federal Standard)



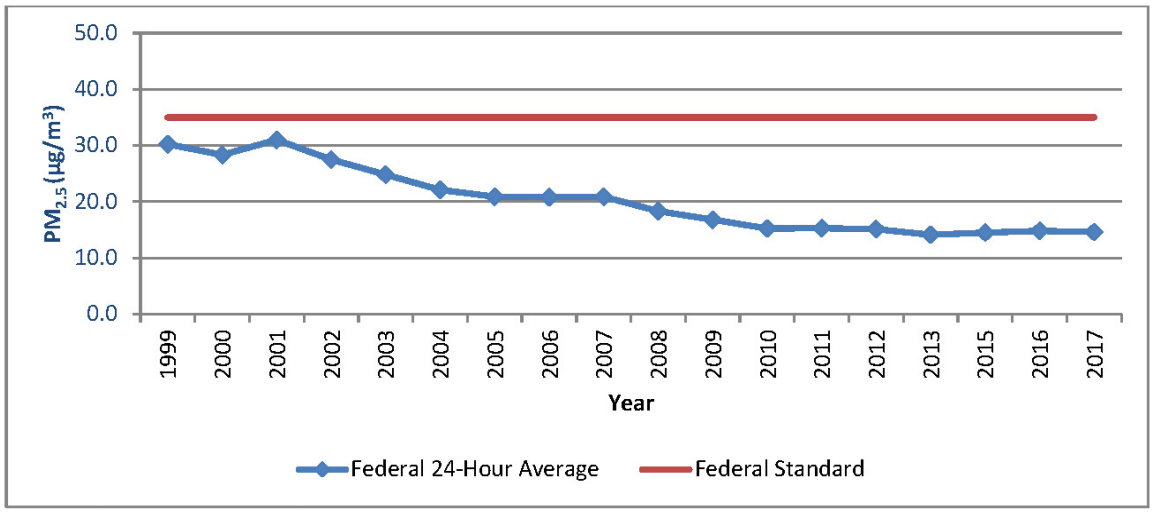
Source: (Urban Crossroads, 2019a, Table 2-5)

South Coast Air Basin PM_{10} Trend (State Standard)



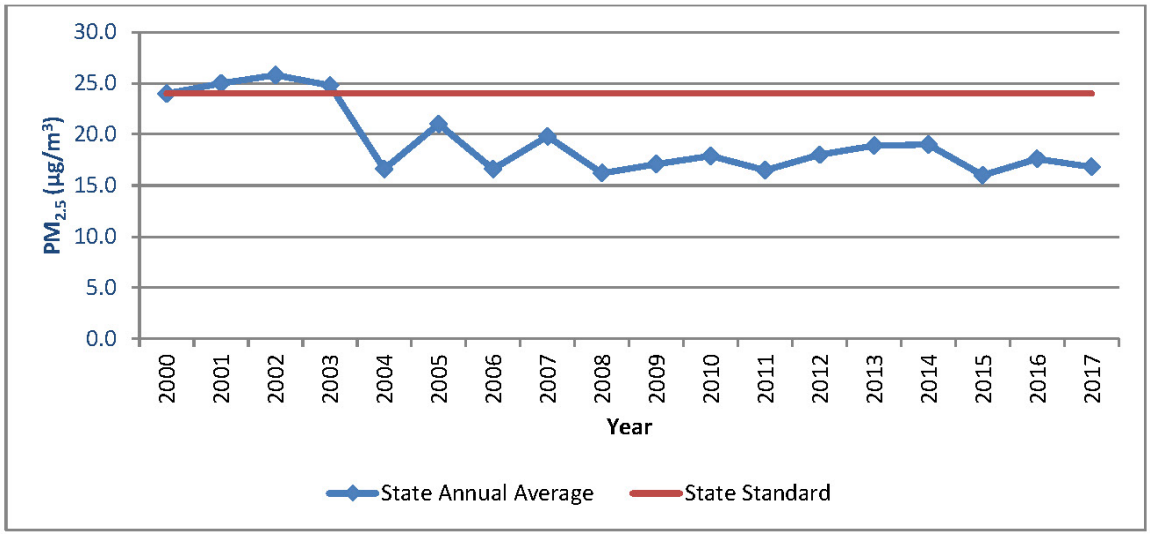
Source: (Urban Crossroads, 2019a, Table 2-6)

South Coast Air Basin $PM_{2.5}$ Trend (Federal Standard)



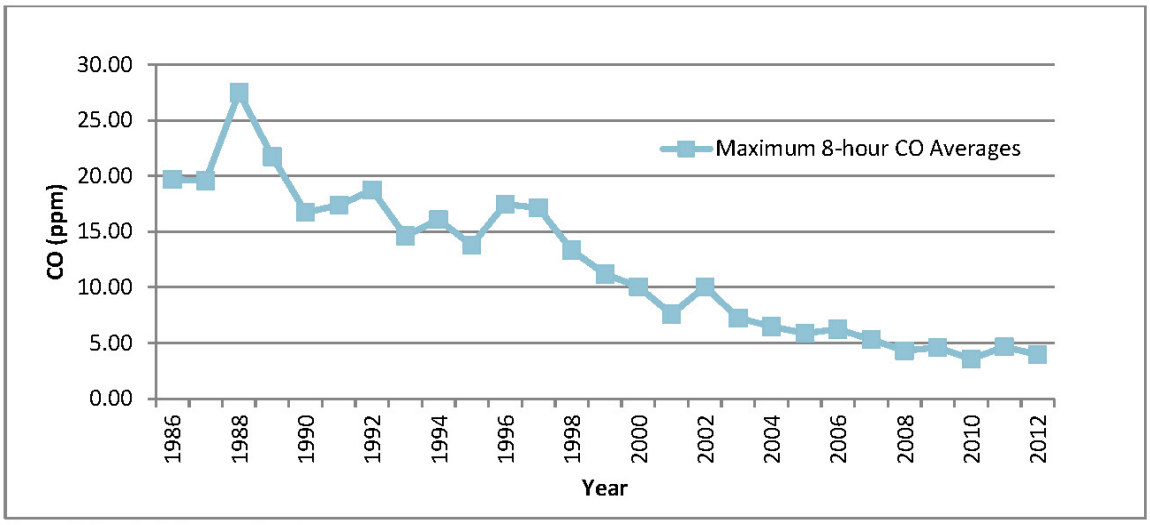
Source: (Urban Crossroads, 2019a, Table 2-7)

South Coast Air Basin $PM_{2.5}$ Trend (State Standard)



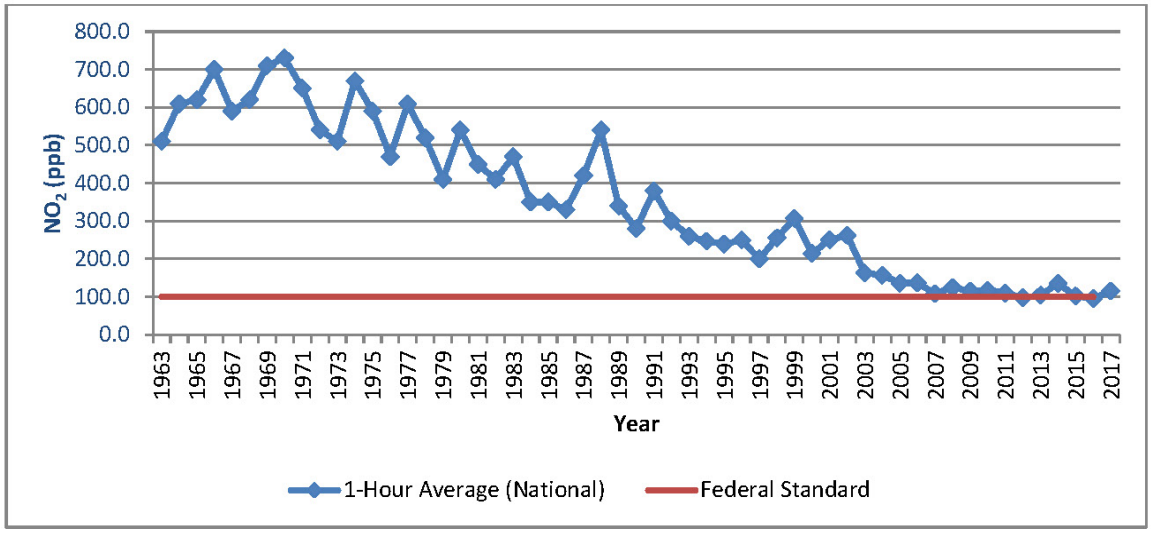
Source: (Urban Crossroads, 2019a, Table 2-8)

South Coast Air Basin CO Trend



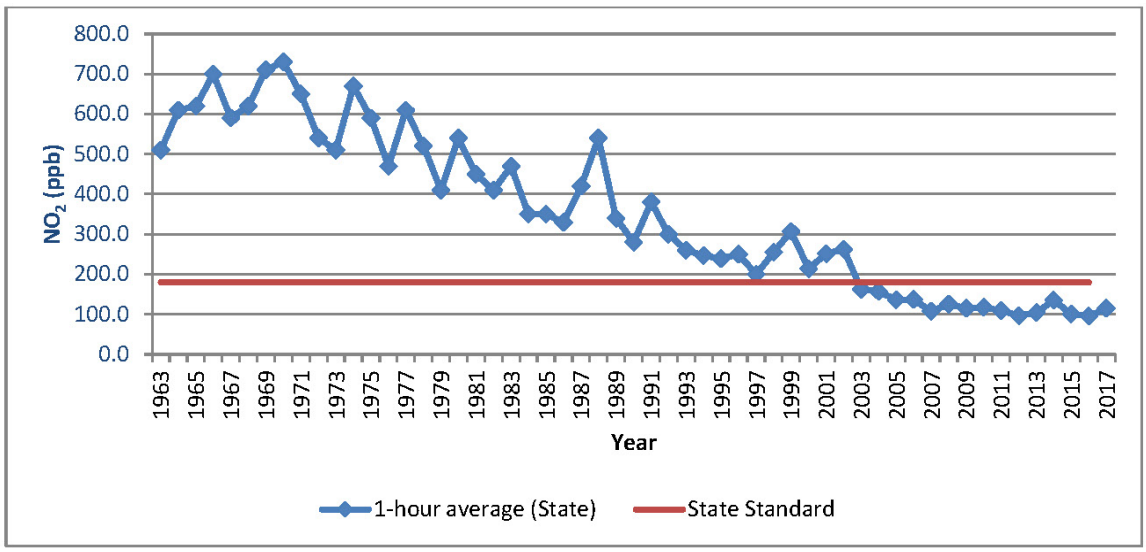
Source: (Urban Crossroads, 2019a, Table 2-9)

South Coast Air Basin NO_2 Trend (Federal Standard)



Source: (Urban Crossroads, 2019a, Table 2-10)

South Coast Air Basin NO_2 Trend (State Standard)



Source: (Urban Crossroads, 2019a, Table 2-11)

❑ Toxic Air Contaminants

Toxic air contaminants (TACs) are a category of air pollutants that have been attributed to carcinogenic and non-carcinogenic health risks. Beginning in the mid-1980s, the California Air Resources Board (CARB) adopted a series of regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and stationary sources, such as cars, trucks, stationary

sources, and consumer products. As a result of CARB's regulatory efforts, ambient concentrations of TACs have declined substantially across the State. (Urban Crossroads, 2019a, p. 28)

To reduce TAC emissions from mobile sources, CARB has required that all light- and medium-duty vehicles sold in California since 1996 be equipped with an on-board diagnostic system to alert drivers of potential engine problems (as approximately half of all tailpipe emissions result from malfunctioning emissions control devices). Also, since 1996, CARB has required the use of cleaner burning, reformulated gasoline in all light- and medium-duty vehicles. These two regulations resulted in an over 80 percent reduction in TAC emissions from light- and medium-duty vehicles in the State between 1990 and 2012 despite an approximately 30 percent increase in the State's population over that same time period. The CARB also implemented programs to retrofit diesel-fueled engines and facilitate the use of diesel fuels with ultra-low sulfur content to minimize the amount of diesel emissions and their associated TACs. As a result of CARB's programs, diesel emissions and their associated TACs fell by approximately 68 percent since 2000 despite an approximately 81 percent increase in miles traveled by diesel vehicles during that same time period. CARB's efforts at reducing stationary source TACs have been focused mainly on the dry cleaning and paint/architectural coating industries, which have resulted in a greater than 85 percent reduction of stationary source TACs across the State between 1990 and 2012. (Urban Crossroads, 2019a, pp. 28-29)

In 2000, the SCAQMD prepared a comprehensive urban toxic air pollution study to evaluate the TAC concentration levels in the SCAB and their associated health risks, called *MATES-II (Multiple Air Toxics Exposure Study in the South Coast Air Basin)*. *MATES-II* showed the average excess cancer risk within the SCAB ranging from 1,100 in one million persons to 1,750 in one million persons, with an average regional excess cancer risk of about 1,400 in one million. As part of the *MATES-II* study, the SCAQMD concluded that diesel particulate matter (DPM) accounted for more than 70 percent of the identified excess cancer risk in the SCAB. The SCAQMD has updated their urban toxic air pollution survey twice since 2000, with the 2008 (*MATES-III*) and 2014 updates (*MATES-IV*) showing reductions in the average excess cancer risk within the SCAB relative to *MATES-II*. The current version of the urban toxic air pollution survey, *MATES-IV*, is the most comprehensive dataset of ambient air toxic levels and health risks within the SCAB. The *MATES-IV* report estimates the average Basin-wide excess cancer risk level within the SCAB to be 418 in one million, an approximately 70 percent improvement from the findings of *MATES-II* report just 15 years earlier. According to SCAQMD, DPM accounts for approximately 68 percent of the total risk shown in *MATES-IV*. (Urban Crossroads, 2019a, p. 31)

2. Local Air Quality

❑ Criteria Pollutants

Local air quality data was collected from the SCAQMD air quality monitoring station located nearest to the Project site: Central San Bernardino Valley 1 monitoring station (located approximately 6.6 miles northwest of the Project site). Data was collected for the three most recent years for which data

was available (2015-2017). (Urban Crossroads, 2019a, p. 17) Ambient air pollutant concentrations in the Project area are summarized in Table 4.2-3, *Project Area Air Quality Monitoring Summary*.

Table 4.2-3 Project Area Air Quality Monitoring Summary

POLLUTANT	STANDARD	YEAR 2015	2016	2017
Ozone				
Maximum Federal 1-Hour Concentration (ppm)		0.134	0.158	0.158
Maximum Federal 8-Hour Concentration (ppm)		0.117	0.1128	0.136
Number of Days Exceeding Federal 1-Hour Standard	>0.07 ppm	6	10	14
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	52	70	81
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	78	106	112
Number of Days Exceeding State 8-Hour Standard	> 0.070 ppm	79	108	114
Carbon Monoxide (CO)				
Maximum Federal 1-Hour Concentration	> 35 ppm	2.3	2.2	2.5
Maximum Federal 8-Hour Concentration	> 20 ppm	1.2	1.7	2.3
Nitrogen Dioxide (NO_2)				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.071	0.061	0.066
Annual Federal Standard Design Value		15.2	16.6	15.9
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum Federal 24-Hour Concentration ($\mu g/m^3$)	> 150 $\mu g/m^3$	53.5	32.5	38.2
Annual Federal Arithmetic Mean ($\mu g/m^3$)		10.7	10.8	11.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 $\mu g/m^3$	2	0	1
Number of Days Exceeding State 24-Hour Standard	> 50 $\mu g/m^3$	--	--	--
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum Federal 24-Hour Concentration ($\mu g/m^3$)	> 35 $\mu g/m^3$	78.0	91.0	86.0
Annual Federal Arithmetic Mean ($\mu g/m^3$)	> 12 $\mu g/m^3$	30.7	33.1	30.9
Number of Days Exceeding Federal 24-Hour Standard	> 35 $\mu g/m^3$	17	33	35

-- = data not available from SCAQMD or ARB
Source: (Urban Crossroads, 2019a, Table 2-3)

❑ Toxic Air Contaminants

As part of preparation of the *MATES-IV* study, the SCAQMD collected toxic air contaminant data at 10 fixed sites within the SCAB. None of the fixed monitoring sites are located within the vicinity of the Project site; however, *MATES-IV* extrapolates the excess cancer risk levels throughout the SCAB using mathematical modeling for specific geographic grids. *MATES-IV* estimates an excess carcinogenic risk of 771.83 in one million for the Project area. (Urban Crossroads, 2019a, p. 31)

4.2.2 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of applicable federal, State, and local regulations and plans governing air quality emissions.

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_3, CO, NO_X, SO_2, PM_{10}, $PM_{2.5}$, and lead. (EPA, 2017a)

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, 2017a)

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_{10}). 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, 2017b) 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_X 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, 2017c)

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, 2017a)

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, 2017a)

2. *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, n.d.)

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, 2019a)

2. *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, 2012)

3. *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, 2019c)

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 § 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 March 2017. The *Final 2016 Air Quality Management Plan (AQMP)* incorporates the latest scientific and technological information and local and regional land development plans, including the Southern California Association of Governments (SCAG) *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. The Final *2016 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 Final *2016 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 *2016 RTP/SCS*.

2. *Applicable SCAQMD Rules*

The SCAQMD Rules that are applicable to construction of the Project include, but are not limited to: Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186/1186.1 (Street Sweepers) (Urban Crossroads, 2019a, p. 3). Rule 1113 requires all buildings within the SCAQMD to adhere to the VOC limits for architectural coatings (SCAQMD,

2013). Rule 431.2 requires all stationary source diesel fuel users to use only ultra-low-sulfur diesel fuel having a maximum sulfur content of 15 parts per million (ppm) (SCAQMD, 2000). Rule 403 requires the implementation of best available dust control measures (BACMs) during activities capable of generating fugitive dust (SCAQMD, 2005). Rule 1186 requires local governments within the SCAQMD to procure certified street sweepers for new equipment purchases or new street sweeping contracts made after January 1, 2000 (SCAQMD, 2008). Rule 1186.1 is a supplemental rule to Rule 1186, which requires certain public and private sweeper fleet operators to acquire and operate alternative-fuel or otherwise less-polluting sweepers when purchasing or leasing these vehicles for sweeping operations undertaken by or for governments or governmental agencies in the jurisdiction of the SCAQMD (SCAQMD, 2009).

3. San Bernardino County Development Code

The County of San Bernardino Development Code Section 83.01.040 provides design, operations, and maintenance standards to reduce air emissions from on and off-road diesel vehicles/equipment and applies to all discretionary land use projects (and would apply to the proposed Project). (County of San Bernardino, 2018a)

4.2.3 Methodology for Calculating Project-Related Air Quality Impacts

The California Emissions Estimator Model (CalEEMod), version 2016.3.2, was used to calculate all Project-related air pollutant emissions (with the exception of the Project operational-related localized emissions and diesel particulate matter emissions, refer to Subsection 4.2.3B, below). The CalEEMod is a statewide land use emission computer model that provides a uniform platform to quantify potential criteria pollutant emissions associated with construction and operation of land development projects. CalEEMod was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts, including the SCAQMD. (Urban Crossroads, 2019a, p. 34)

A. Methodology for Calculating Project Construction Emissions

1. Regional Pollutant Emissions

The Project's construction activities are expected to occur in six (6) stages over a period of approximately 11 months: 1) demolition; 2) site preparation; 3) grading; 4) building construction; 5) paving; and 6) architectural coating. Table 3-2 of *Technical Appendix B1* lists the expected duration of each phase of Project construction and analytically assumes that construction would occur between October 2019 and September 2020. This assumption represents a conservative (or "worst-case") analysis scenario because if construction actually commences later than October 2019, construction equipment emission factors could be lower (or at least no higher) than those assumed in the analysis due to emission regulations becoming more stringent over time and the retirement of older (higher-polluting) equipment from construction equipment fleets over time. EIR Table 3-1, *Construction Equipment Assumptions*, previously listed the pieces of heavy equipment expected to be used during each phase of Project construction (refer to in Section 3.0, *Project Description*). The analysis assumptions referenced above are based on information provided by the Project Applicant

and the experience and technical expertise of the Project's air quality technical expert (Urban Crossroads). (Urban Crossroads, 2019a, pp. 34-35)

Refer to Section 3.4 of *Technical Appendix B1* for more detail on the methodology utilized to calculate the Project's estimated construction-related regional pollutant emissions.

2. Localized Pollutant Emissions

Project-related localized pollutant emissions were calculated in accordance with the SCAQMD's *Final Localized Significance Threshold Methodology*. The localized pollutant emissions analysis relies on the same assumptions used to calculate construction-related regional pollutant emissions, as described above. Pursuant to the SCAQMD's recommended methodology, the analysis of construction-related localized pollutant emissions included the following process (Urban Crossroads, 2019a, pp. 40-41):

The CalEEMod was utilized to determine the maximum daily on-site emissions that would occur during construction activity. The SCAQMD's Fact Sheet for Applying CalEEMod to LSTs was used to determine the maximum Project site acreage that would be actively disturbed based on the construction equipment fleet and equipment hours as estimated in the CalEEMod. (Based on the SCAQMD's methodology, the Project is estimated to disturb 4.0 acres per day during peak construction activities.) Because the Project is expected to disturb less than 5.0 acres per day during peak construction activities, the SCAQMD's screening look-up tables were utilized to determine localized pollutant concentration levels at sensitive receptor locations – defined as a place where an individual who might have respiratory difficulties could remain for 24 hours – near the Project site. (Urban Crossroads, 2019a, p. 41)

The SCAQMD's *Final Localized Significance Threshold Methodology* indicates that off-site mobile emissions from development projects should be excluded from localized emissions analyses. Therefore, for purposes of calculating the Project's construction-related localized pollutant emissions, only emissions included in the CalEEMod on-site emissions outputs were considered. (Urban Crossroads, 2019a, pp. 41-42)

Refer to Section 3.6 of *Technical Appendix B1* for more detail on the methodology utilized to calculate Project construction-related localized pollutant emissions.

B. Methodology for Calculating Project Operational Emissions

1. Regional Pollutant Emissions

The Project's operational-related regional pollutant emissions analysis quantifies air pollutant emissions from mobile sources, on-site equipment sources, area sources (e.g., architectural coatings, landscape maintenance equipment), and energy sources.

Mobile source emissions are the product of the number of daily vehicle trips generated by the Project, the composition of the Project's vehicle fleet (mix of passenger cars, light-heavy-duty trucks,

medium-heavy-duty trucks, and heavy-heavy duty trucks), and the number of miles driven by Project vehicles. The Project's average number of daily vehicle trips and vehicle fleet mix were calculated using the SCAQMD's recommended methodology, as described in detail in EIR Subsection 4.12, *Transportation*. For passenger car trips, a one-way trip length of 16.6 miles was assumed pursuant to the CalEEMod™ model defaults. For trucks, the SCAQMD's recommended average one-way trip length of 40 miles was used to accurately represent warehouse, distribution center, and industrial land use projects. (Urban Crossroads, 2019a, pp. 38-39)

The estimated area source emissions and energy source emissions analyses for the Project rely on default inputs within the CalEEMod (Urban Crossroads, 2019a, p. 38).

Refer to Section 3.5 of *Technical Appendix B1* for detailed information on the methodology utilized to calculate the Project's operational regional pollutant emissions.

2. Localized Pollutant Emissions

The LST analysis evaluates on-site emissions sources only. However, the CalEEMod outputs do not separate on-site and off-site mobile source emissions. For purposes of analysis, on-site mobile source emissions are estimated to be equivalent to five percent (5%) of the Project's one-way vehicle trip length. Considering that for the Project's analysis the one-way trip length for passenger cars is 16.6 miles and 40 miles for trucks, 5% of this total would represent an on-site travel distance of approximately 0.83-mile for each passenger car and approximately 2 miles for each truck. Comparatively, the actual maximum distance a passenger car would travel through the Project's parking lot is approximately 0.20-mile while the maximum distance a truck would travel through the facility is approximately 0.30-mile. Accordingly, the 5% assumption used in the Project's analysis substantially overstates the actual localized impact of the Project's on-site mobile source emissions. (Urban Crossroads, 2019a, p. 47)

Refer to Section 3.7 of *Technical Appendix B1* for detailed information on the methodology utilized to calculate the Project's operational localized pollutant emissions.

3. Diesel Particulate Matter Emissions

Project-related vehicle diesel particulate matter (DPM) emissions were calculated using emission factors for PM_{10} generated with EMFAC 2014. Refer to Section 2.2 of *Technical Appendix B2* for a detailed description of the model inputs and equations used in the estimation of the Project-related DPM emissions. (Urban Crossroads, 2019b, pp. 7-9, 11)

The potential health risks of Project-related DPM emissions were quantified in accordance with the guidelines in the SCAQMD's "Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD, 2019b)." Pursuant to SCAQMD's recommendations, emissions were modeled using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) software program. Refer to Section 2.3 of *Technical Appendix B2* for a detailed description of the model

inputs and equations used in the calculation of average particulate concentrations during operation of the Project. (Urban Crossroads, 2019b, pp. 11, 13-14)

Health risks associated with exposure to DPM emissions at a given concentration are defined in terms of the probability of developing cancer or adverse, chronic non-cancer health effects as a result of exposure to DPM emissions at a given concentration. The cancer and non-cancer risk probabilities are determined through a series of equations to calculate unit risk factor, cancer potency factor, and chronic daily intake. The evaluation results in a maximum health risk value, which is merely a calculation of risk and does not necessarily mean anyone will contract cancer or other non-cancer health concern as a result of the exposure. The equations and input factors utilized in the Project analysis were obtained from Office of Environmental Health Hazard Assessment (OEHHA). Refer to Section 2.4 of *Technical Appendix B2* for a detailed description of the variable inputs and equations used in the calculations of receptor population health risks associated with Project operations. (Urban Crossroads, 2019b, pp. 14-15)

In the analysis of potential DPM effects, potential cancer and non-cancer risks were calculated for the maximally exposed individual resident (MEIR), maximally exposed individual worker (MEIW), and maximally exposed individual school child (MEISC), for receptors located within a 1,320-foot radius of the Project site and the Project's primary truck routes. CARB and SCAQMD emissions models indicate that 80 percent of DPM particles settle out of the air within 1,000 feet from the emissions source. Accordingly, the 1,320-foot distance used in the Project's analysis provides a conservative study area that captures the geographic area subject to the maximum potential effect from Project-related DPM emissions. The maximally exposed individual resident (MEIR) is located immediately adjacent to the west of the Project site, the maximally exposed individual worker (MEIW) is located at the southeast corner of Slover Avenue and Cactus Avenue, and the maximally exposed individual school child (MEISC) occurs at the Slover Mountain High School (located approximately 1,689 feet northwest of the Project site). (Urban Crossroads, 2019b, pp. 16-17)

4.2.4 Basis for Determining Significance

The proposed Project would 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;*
c. *Expose sensitive receptors to substantial pollutant concentrations; or*
d. *Result in other emissions (such as those leading odors) adversely affecting a substantial number of people.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects to regional and local air quality that could result from development projects.

The Project would result in a significant impact under Threshold "a" if the Project were determined to conflict with the SCAQMD *2016 AQMP*. As defined in 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 (Urban Crossroads, 2019a, p. 51):

- 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 *2016 AQMP*'s future year buildout assumptions.

For evaluation under Threshold "b," the Project would result in a 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 4.2-4, *SCAQMD Maximum Daily Emissions Thresholds*. (Urban Crossroads, 2019a, pp. 33-45)

Table 4.2-4 SCAQMD Maximum Daily Emissions Thresholds

Pollutant	Construction	Operation
Regional Thresholds		
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Localized Thresholds		
NOx	118 lbs/day (Demolition)	270 lbs/day
	220 lbs/day (Site Preparation)	
	237 lbs/day (Grading)	
CO	667 lbs/day (Demolition)	1,746 lbs/day
	1,359 lbs/day (Site Preparation)	
	1,488 lbs/day (Grading)	
PM_{10}	4 lbs/day (Demolition)	4 lbs/day
	11 lbs/day (Site Preparation)	
	12 lbs/day (Grading)	
$PM_{2.5}$	3 lbs/day (Demolition)	2 lbs/day
	6 lbs/day (Site Preparation)	
	7 lbs/day (Grading)	

Source: (Urban Crossroads, 2019a, Table 3-1 and Table 3-8)

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 would exceed one or more of the "Localized Thresholds" listed in Table 4.2-4;
- The Project would cause or contribute to a CO "Hot Spot;" and/or
- The Project's toxic air contaminant emissions, like DPM, would expose sensitive receptor populations to an incremental cancer risk of greater than 10 in one million; and/or result in a non-carcinogenic health risk rating ("Acute Hazard Index") greater than 1.0.

For Threshold "d," a significant impact would occur if the Project's construction and/or operational activities result in air emissions leading to an odor nuisance pursuant to SCAQMD Rule 402 (SCAQMD, 1976).

4.2.5 IMPACT ANALYSIS

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

The SCAQMD *2016 AQMP*, which is the applicable air quality plan for the Project area, estimates long-term air quality conditions for the SCAB. These criteria for determining consistency with the *2016 AQMP* 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 emissions thresholds. As disclosed under the analysis for Threshold "c," below, Project construction (site-preparation phase) would exceed the SCAQMD localized emissions threshold for fine particulate matter ($PM_{2.5}$), and by extension, would result in violations of the NAAQS and/or CAAQS. Accordingly, localized criteria pollutant emissions from Project construction would increase the frequency or severity of existing air quality violations, cause or contribute to new violations, and/or delay the timely attainment of air quality standards or the interim emissions reductions specified in the *AQMP*. (Urban Crossroads, 2019a, p. 51) This is considered a short-term significant impact of the Project's construction.

The emissions from Project operations would not exceed SCAQMD localized emissions thresholds. Thus, long-term operation of the Project would not violate the NAAQS or CAAQS and, therefore, would not increase the frequency or severity of existing air quality

violations, cause or contribute to new violations, and/or delay the timely attainment of air quality standards or the interim emissions reductions specified in the *AQMP* (Urban Crossroads, 2019a, p. 51).

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

The air quality conditions presented in the *2016 AQMP* are based on the growth forecasts identified by SCAG in its *2016-2040 RTP/SCS*. The *2016-2040 RTP/SCS* anticipates that development in the various incorporated and unincorporated areas within the SCAB will occur in accordance with the adopted general plans for these areas. As such, development projects that propose to increase the intensity and/or use on an individual property may result in increased stationary area source emissions and/or vehicle source emissions when compared to the *2016 AQMP* assumptions. If a development project does not exceed the growth projections in the applicable local general plan, then the project is considered to be consistent with the growth assumptions in the AQMP. (Urban Crossroads, 2019a, pp. 51-52)

Under existing conditions, the Project site is designated for "Single Residential, one-acre minimum lot size, with Additional Agricultural Overlay (RS-1-AA)" land uses by the County of San Bernardino's Land Use Zone Map. The Project includes a request to change the existing General Plan land use designation for the Project site from "RS-1-AA" to "Community Industrial (IC)," which, if approved, would result in a greater development intensity on the Project site than anticipated by the current General Plan. However, as discussed under the analysis for Thresholds "b" and "c," emissions from the operation of the Project would not exceed SCAQMD regional or localized thresholds under long-term (i.e., buildout conditions). Accordingly, although implementation of the Project would exceed the growth projections in the County of San Bernardino General Plan, the unanticipated growth would not result in a substantial adverse effect to air quality.

In summary, because Project construction would result in air emissions that do not satisfy *AQMP* Consistency Criterion No. 1, implementation of the Project during its short-term construction phase is determined to be inconsistent with the *2016 AQMP* and this inconsistency is regarded as a significant impact.

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?***

As indicated in Table 4.2-2, *SCAB Criteria Pollutant Attainment Status*, the SCAB is in non-attainment status for ozone (1- and 8-hour) and particulate matter ($PM_{2.5}$ and PM_{10}). Refer to Subsection 4.2.1D for more information on existing air quality pollutant levels.

A. Construction Emissions Impact Analysis

The peak regional emissions related to the Project's construction are summarized in Table 4.2-5, *Peak Construction Emissions Summary*. Detailed air model outputs are presented in Appendix 3.1 of *Technical Appendix B1*.

Table 4.2-5 Peak Construction Emissions Summary

Year	Emissions (pounds per day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2019	5.95	68.27	34.75	0.07	11.05	6.75
2020	29.26	60.96	33.14	0.08	6.49	3.78
Maximum Daily Emissions	**29.26**	**68.27**	**34.75**	**0.08**	**11.05**	**6.75**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2019a, Table 3-4)

As shown in Table 4.2-5, peak construction-related regional emissions of VOCs, NO_X, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed the applicable SCAQMD thresholds. Accordingly, the Project's construction activities would not emit substantial concentrations of these pollutants and would not contribute to an existing or projected air quality violation on a cumulatively-considerable basis. Impacts associated with construction-related regional emissions of VOCs, NO_X, CO, SO_X, PM_{10} and $PM_{2.5}$ would be less than significant and mitigation is not required.

B. Operational Emissions Impact Analysis

Operation of the Project would result in the emissions presented in Table 4.2-6, *Peak Operational Emissions Summary*. Detailed air model outputs are presented in Appendix 3.1 of *Technical Appendix B1*.

As shown in Table 4.2-6, peak operational-related regional emissions of VOCs, NO_X, CO, SO_X, and particulate matter (PM_{10} and $PM_{2.5}$) would not exceed the applicable SCAQMD regional thresholds. Accordingly, activities associated with operation of the Project would not emit substantial concentrations of these pollutants and would not contribute to an existing or projected air quality violation on a cumulatively-considerable basis. Impacts associated with operational-related regional emissions of VOCs, NO_X, CO, SO_X, PM_{10} and $PM_{2.5}$ would be less than significant and mitigation is not required.

Table 4.2-6 Peak Operational Emissions Summary

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Source	5.83	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.02	0.14	0.12	8.40E-04	0.01	0.01
Mobile (Passenger Cars)	0.56	0.80	11.59	0.04	4.55	1.22
Mobile (Trucks)	0.87	27.30	6.37	0.10	3.37	1.07
Total Maximum Daily Emissions	**7.27**	**28.25**	**18.14**	**0.14**	**7.94**	**2.30**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Operational Activities – Winter Scenario	**Emissions (pounds per day)**					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Source	5.83	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.02	0.14	0.12	8.40E-04	0.01	0.01
Mobile (Passenger Cars)	0.46	0.84	9.33	0.04	4.55	1.22
Mobile (Trucks)	0.89	27.99	6.64	0.10	3.37	1.07
Total Maximum Daily Emissions	**7.18**	**28.97**	**16.15**	**0.14**	**7.94**	**2.30**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2019a, Table 3-6)

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

A. Localized Criteria Pollutant Analysis

1. Construction Analysis

Table 4.2-7, *Peak Construction Localized Emissions Summary*, summarizes the localized criteria pollutant emissions during peak Project-related construction activities.

As shown in Table 4.2-7, localized emissions of NO_X, CO, and particulate matter (PM_{10}) would not exceed applicable SCAQMD thresholds during peak Project construction activities. Accordingly, Project construction would not expose any sensitive receptors to substantial NO_X, CO, and PM_{10} concentrations. Impacts would be less than significant.

Notwithstanding, localized particulate matter ($PM_{2.5}$) emissions would exceed the applicable SCAQMD threshold during the "Site Preparation" stage of Project construction. Site preparation entails clearing the site of trees and debris, leveling the ground for building, and moving materials to and from the site. This construction stage is projected to occur over a period of 10 days on the Project site. Accordingly, Project construction has the potential to expose sensitive receptors to substantial particulate matter ($PM_{2.5}$) concentrations, which would result in a significant direct and cumulative impact for which mitigation is required.

Table 4.2-7 Peak Construction Localized Emissions Summary

On-Site Demolition Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**35.78**	**22.06**	**1.93**	**1.69**
SCAQMD Localized Threshold	118	667	4	3
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
On-Site Site Preparation Emissions	**Emissions (pounds per day)**			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**68.20**	**23.17**	**10.85**	**6.70**
SCAQMD Localized Threshold	220	1,359	11	6
Threshold Exceeded?	**NO**	**NO**	**NO**	**YES**
On-Site Grading Emissions	**Emissions (pounds per day)**			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**65.83**	**33.93**	**6.47**	**3.91**
SCAQMD Localized Threshold	237	1,488	12	7
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2019a, Table 3-8)

A recent Supreme Court of California decision, *Sierra Club v. County of Fresno (Friant Ranch)*, states that EIRs should relate a project's expected adverse air quality impacts to likely human health consequences or explain why it is not feasible at the time of preparing the EIR to provide such an analysis. Given that the proposed Project's construction would result in a significant direct and cumulative impact (albeit over a short time period) associated with fine particulate matter emissions ($PM_{2.5}$), the potential health consequences associated with short-term exposure to substantial concentrations of this air pollutant were considered. The potential health effects of the other air pollutants that would be generated during the Project's construction and operation also were considered. Although as explained below it may be misleading and unreliable to attempt to specifically quantify the health risks associated with Project-related criteria pollutant emissions, including Project construction $PM_{2.5}$ emissions, and other air pollutant emissions that would result the Project, the Project's air quality impact analysis (*Technical Appendix B1*), mobile source health risk assessment (*Technical Appendix B2*), and supplemental air quality impact analysis (*Technical Appendix B3*) provide extensive information concerning the quantifiable and non-quantifiable health risks related to Project construction and long-term operation. Refer to these EIR appendices for additional information.

Elevated ambient concentrations of fine particulate matter (PM_{10} and $PM_{2.5}$) have been linked to an increase in 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. 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_{10} and $PM_{2.5}$. These and

other health effects associated with air pollutants that would be generated by the Project were previously described in Subsection 4.2.1C, *Air Quality Pollutants and Associated Human Health Effects*. As noted in the Brief of Amicus Curiae by the SCAQMD in the *Friant Ranch* case (hereafter, "Brief"), the SCAQMD – which has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State – indicated that quantifying specific health risks that may result from criteria air pollutants (such as $PM_{2.5}$) from proposals like the Project would be unreliable and misleading due to the relatively small-scale of the Project (from a regional perspective), unknown variables related to pollutant generation/release and receptor exposure, and regional model limitations (Urban Crossroads, 2019c, pp. 12-55). Accordingly, other than the localized analyses presented below and on the following pages (and which show less-than-significant health hazard impacts from Project implementation) current scientific, technological, and modeling limitations prevent accurate and quantifiable relation of the Project's $PM_{2.5}$ and other criteria air pollutant emissions to likely health consequences for local and regional receptors.

2. Operational Analysis

Table 4.2-8, *Peak Operational Localized Emissions Summary*, summarizes the localized criteria pollutant emissions during the Project's peak operational activities.

Table 4.2-8 Peak Operational Localized Emissions Summary

Operational Activity	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**1.55**	**1.08**	**0.41**	**0.13**
SCAQMD Localized Threshold	270	1,746	4	2
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2019a, Table 3-10)

As shown in Table 4.2-8, Project operation would not exceed the applicable SCAQMD thresholds for localized NO_X, CO, and particulate matter (PM_{10} and $PM_{2.5}$) emissions. Accordingly, operation of the Project would not expose any sensitive receptors to substantial criteria pollutant concentrations. Impacts would be less than significant and no mitigation is required.

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. A Project-specific CO "hot spot" analysis was not performed because CO attainment in the SCAB was thoroughly analyzed as part of SCAQMD's *2003 AQMP* and the *1992 Federal Attainment for Carbon Monoxide Plan (1992 CO Plan)*. As identified in the SCAQMD's *2003 AQMP* and the *1992 CO Plan*, peak CO concentrations in the SCAB were the byproduct of unusual meteorological and topographical conditions and were not the result of traffic congestion. For context, the CO "hot spot" analysis performed for the *2003 AQMP* recorded a CO concentration of 8.4 parts per million (8-hour)

at the Long Beach Boulevard/Imperial Highway intersection in Los Angeles County; however, only a small portion of the recorded CO concentrations (0.7 parts per million) were attributable to traffic congestion at the intersection. The vast majority of the recorded CO concentrations at the Long Beach Boulevard/Imperial Highway intersection (7.7 parts per million) were attributable to ambient air concentrations. In comparison, the busiest intersections in the Project site vicinity would not experience peak congestion levels or ambient CO concentrations comparable to the conditions observed at the Long Beach Boulevard/Imperial Highway intersection. Based on the relatively low traffic congestion levels, low existing ambient CO concentrations, and the lack of any unusual meteorological and/or topographical conditions in the Project site vicinity, the Project's operation is not expected to cause or contribute to a CO "hot spot." (Urban Crossroads, 2019a, pp. 18, 48-50) Impacts would be less than significant and mitigation is not required.

C. *Toxic Air Contaminant Emissions Impact Analysis*

Based on the typical operations at a warehouse facility, which do not include smoke stacks or other stationary point-sources of air pollutant emissions, the warehouse building proposed for Project site is not expected to generate stationary emissions of toxic air contaminants. However, the Project's operational activities would generate/attract diesel-fueled trucks. Diesel-fueled trucks produce DPM, which is a toxic air contaminant and is known to be associated with acute and chronic health hazards – including cancer. Project-related DPM health risks are summarized below. Detailed air dispersion model outputs and risk calculations are presented in Appendix 2.1 of *Technical Appendix B2*.

At the MEIR, the maximum incremental cancer risk attributable to the DPM emissions from trucks traveling to/from the Project site is calculated to be 1.29 in one million (which would not exceed the SCAQMD cancer risk threshold of 10 in one million) and the attributable non-cancer health risk index would be 0.0005 (which would not exceed the SCAQMD non-cancer health risk index threshold of 1.0). (Urban Crossroads, 2019b, p. 1) Accordingly, the Project's long-term operations would not directly cause or contribute in a cumulatively-considerable manner to the exposure of residential receptors near the Project site or its primary truck routes to substantial DPM emissions. Impacts to residential receptors would be less than significant.

At the MEIW, the maximum incremental cancer risk attributable to the DPM emissions from trucks traveling to/from the Project site is calculated to be 0.11 in one million (which would not exceed the SCAQMD cancer risk threshold of 10 in one million) and the attributable non-cancer health risk index would be 0.0003 (which would not exceed the SCAQMD non-cancer health risk index threshold of 1.0). (Urban Crossroads, 2019b, p. 1) Accordingly, the Project's long-term operations would not directly cause or contribute in a cumulatively-considerable manner to the exposure of worker receptors near the Project site or its primary truck routes to substantial DPM emissions. Impacts to worker receptors would be less than significant.

At the MEISC, the maximum incremental cancer risk attributable to the DPM emissions from trucks traveling to/from the Project site is calculated to be 0.03 in one million (which would not exceed the SCAQMD cancer risk threshold of 10 in one million) and the attributable non-cancer health risk

index would be 0.00006 (which would not exceed the SCAQMD non-cancer health risk index threshold of 1.0). (Urban Crossroads, 2019b, p. 1) Accordingly, the Project's long-term operations would not directly cause or contribute in a cumulatively-considerable manner to the exposure of school child receptors near the Project site or its primary truck routes to substantial DPM emissions. Impacts to school child receptors would be less than significant.

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

During construction activities on the Project site, odors could be produced by construction equipment exhaust or from the application of asphalt and/or architectural coatings. However, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. In addition, construction activities on the Project site would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. (Urban Crossroads, 2019a, p. 53) Accordingly, the Project's construction would not create objectionable odors affecting a substantial number of people and impacts would be less than significant.

During long-term operation, the Project would operate as a warehouse facility, which is not typically associated with the emission of objectionable odors. Temporary outdoor refuse storage could be a potential source of odor; however, Project-generated refuse is required to be stored in covered containers and removed at regular intervals in compliance with the County's solid waste regulations, thereby precluding any significant odor impact. Furthermore, the occupant(s) of the proposed warehouse building would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation. (Urban Crossroads, 2019a, p. 53) As such, long-term operation of the Project would not create objectionable odors affecting a substantial number of people and impacts would be less than significant.

4.2.6 Cumulative Impact Analysis

As described under the analysis for Threshold "a," the implementation of the Project would result in a conflict with the SCAQMD's *2016 AQMP* because proposed construction activities during the site preparation phase would exceed the SCAQMD localized emissions threshold for particulate matter ($PM_{2.5}$), which would violate the NAAQS and/or CAAQS specified in the *AQMP*. The Project's conflict with the *AQMP* is determined to be a cumulatively-considerable impact.

Based on SCAQMD guidance, any exceedance of a regional or localized threshold for criteria pollutants also is considered to be a cumulatively-considerable effect, while air pollutant emissions that fall below applicable regional and/or localized thresholds are not considered cumulatively-considerable. As discussed in the preceding analysis under Threshold "c," the SCAQMD localized thresholds for $PM_{2.5}$ emissions would be exceeded during one stage of Project construction (Site Preparation). Therefore, the localized emissions of $PM_{2.5}$ resulting from Project construction would

be cumulatively-considerable and mitigation would be required. All other Project-related construction- and operational regional and localized air pollutant emissions – including DPM – would not exceed the applicable SCAQMD thresholds and, therefore, are not considered cumulatively-considerable. As discussed under Threshold "c," the air emissions from vehicles traveling to-and-from the Project site would not contribute to the formation of a CO "hot spot" and would not substantially increase carcinogenic and non-carcinogenic risk factors for nearby sensitive receptors.

As indicated in the analysis of Threshold "d," above, there are no Project components that would expose a substantial number of sensitive receptors to objectionable odors. There are no known sources of offensive odors in the Project area. Because the Project's construction and operation would not create substantial and objectionable odors and because there are no sources of objectionable odors in the areas immediately surrounding the Project site, there is no potential for odors from the Project site to commingle with odors from nearby development projects and expose nearby sensitive receptors to substantial, offensive odors. Accordingly, implementation of the Project would result in a less-than-significant cumulative impact related to odors.

4.2.7 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project would violate the NAAQS and/or CAAQS during the short-term site preparation phase of Project construction, which would conflict with the SCAQMD's *2016 AQMP*.

Thresholds b: Less-than-Significant Impact. The Project's regional criteria pollution emissions during construction and operation would not exceed the applicable SCAQMD thresholds and would not contribute to an existing or projected air quality violation, on a direct or cumulatively-considerable basis.

Threshold c: Significant Direct and Cumulatively-Considerable Impact. The Project would exceed the applicable SCAQMD localized thresholds for $PM_{2.5}$ emissions during the Site Preparation stage of construction, which would result in a significant direct and cumulatively-considerable impact.

Threshold d: Less-than-Significant Impact. The Project would not produce air emissions that would lead to unusual or substantial construction-related odors. Odors associated with long-term operation of the Project would be minimal and less than significant. The Project is required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance.

4.2.8 Mitigation

The following mitigation measures would reduce particulate matter (PM_{10} and $PM_{2.5}$) emissions during Project construction.

MM 4.2-1 Prior to grading permit issuance, the County of San Bernardino shall verify that a note is included on grading plans that requires all construction equipment used on the Project site during the site preparation phase and that exceeds 150 horsepower to be California Air Resources Board (CARB) Tier 3 equivalent or better. The Project contractor(s) shall be required to comply with this note and allow inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance.

MM 4.2-2 The Project shall comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County of San Bernardino shall verify that the following notes are specified on the grading plan. The Project construction contractor(s) shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance.

a) During grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system, or other comparable means, shall occur in the mid-morning, afternoon, and after work is done for the day. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site.

b) Temporary signs shall be installed on the construction site along all unpaved roads indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place for the duration of construction activities that include vehicle activities on unpaved roads.

c) Gravel pads must be installed at all access points to prevent tracking of mud onto public roads.

d) Install and maintain trackout control devices in effective condition at all access points where paved and unpaved access or travel routes intersect (e.g., install wheel shakers, wheel washers, limit site access).

e) When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

f) All street frontages adjacent to the construction site shall be swept at least once a day using SCAQMD Rule 1186 certified street sweepers utilizing reclaimed water trucks if visible soil materials are carried to adjacent streets.

g) Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and initiate corrective action to legitimate complaints within 24 hours.

h) Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil.

i) Any on-site stock piles of debris, dirt, or other dusty material shall be covered or watered as necessary to minimize fugitive dust pursuant to SCAQMD Rule 403.

j) A high wind response plan shall be formulated and implemented for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.

Although the Project's construction-related VOC emissions would be less than significant, the following mitigation would minimize the Project's emissions of VOCs during construction.

MM 4.2-3 Prior to building permit issuance, the County of San Bernardino shall verify that a note is provided on all building plans specifying that compliance with SCAQMD Rule 1113 is mandatory during application of all architectural coatings. Project contractors shall be required to comply with the note and maintain written records of such compliance that can be inspected by the County of San Bernardino upon request. This note also shall indicate that only "low-volatile organic compound" paint products (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used. All other architectural coatings shall comply with the VOC limits prescribed by SCAQMD Rule 1113.

Although the Project's operation-related NO_X emissions would be less than significant, the following mitigation measures would minimize the Project's emissions of NO_X.

MM 4.2-4 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1)

instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged. Prior to the issuance of an occupancy permit, the County of San Bernardino shall conduct a site inspection to ensure that the signs are in place.

MM 4.2-5 All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be electric-powered or powered by non-combustion engines. This requirement shall be noted in the buildings' sale and lease agreements and also shall be noted on all tenant improvement plans submitted to the County of San Bernardino.

4.2.9 Significance of Impacts After Mitigation

Threshold a and c: Less-than-Significant Impact with Mitigation. MM 4.2-1 would require Project contractors to use off-road construction equipment that meet stringent tailpipe emissions standards during the Site Preparation phase of Project construction. With implementation of MM 4.2-1, localized particulate matter ($PM_{2.5}$) concentrations during the Site Preparation stage of Project construction would fall below the applicable SCAQMD thresholds during construction (see Table 4.2-9) and, therefore, would not expose sensitive receptors to substantial pollutant concentrations.

Table 4.2-9 Site Preparation Localized Emissions Summary (With Mitigation)

On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**48.65**	**26.36**	**9.91**	**5.88**
SCAQMD Localized Threshold	220	1,359	11	6
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2019a, Table 3-9)

4.3 BIOLOGICAL RESOURCES

This Subsection assesses the potential for the Project to impact sensitive biological resources. The analysis in this Subsection is based, primarily, on information contained in a site-specific technical report prepared by L&L Environmental, Inc. (hereafter, "L&L") titled, "Biological Assessment, Special Status Botanical Survey, and Breeding Season Burrowing Owl Survey for the Slover and Cactus Warehouse Project" (hereafter, "Biological Resources Assessment") and dated September 2018. The technical report is included as *Technical Appendix C* to this EIR (L&L, 2018a).

The biological resources assessment included the review of relevant literature, field surveys, and a geographic information system (GIS)-based analysis of vegetation communities. The field study performed by L&L included: 1) a record search and literature review; 2) field reconnaissance survey and vegetation mapping; 3) a focused breeding season survey for the burrowing owl; and 4) a botanical survey during early, middle, and late blooming seasons. (L&L, 2018a, pp. 8-15) Refer to *Technical Appendix C* for detailed descriptions of the survey dates, scopes of study, and research and survey methodologies used in the biological resources assessment.

4.3.1 EXISTING CONDITIONS

The Project site was used primarily as an orchard or grove from the late 1930s through the 1990s. The orchard/grove use on-site has been discontinued and the site is occupied by four (4) detached single-family homes and associated outbuildings. The site is generally open, flat land with ornamental landscaping and several mature trees and also contains large areas of disturbed land. As former agriculture land, the site is routinely disked for weed abatement purposes and thus has sparse vegetation. (L&L, 2018a, pp. iv, 1, 5)

A. Vegetation Communities

Based on vegetation mapping conducted by L&L, the Project site contains two (2) distinct vegetation communities: disturbed (approximately 10.7 acres), and developed/ornamental (approximately 2.6 acres). The vegetation communities observed within the Project site are illustrated on Figure 4.3-1, *Vegetation/Habitat Map*. None of the vegetation communities on the Project site are classified as a sensitive natural vegetation community or special-status vegetation community. (L&L, 2018a, p. 16)

B. Special-Status Plants

Thirty-five (35) plant species were identified on-site during site surveys. Most species observed were weedy annuals and 26 of the species were non-native. The complete list of plant species observed on the Project site is included in Appendix A to *Technical Appendix C*. No special-status plant species were observed on the Project site and none of the 74 special-status plant species known to occur in the Project region are expected to occur on the site due to a lack of suitable habitat. (L&L, 2018a, pp. 17-18)

C. Special-Status Wildlife

Twenty-five (25) wildlife species were observed on the Project site during site surveys, including 21 birds, three (3) mammals, and one (1) reptile. The complete list of animal species observed on the Project site is included in Appendix A to *Technical Appendix C*.

One (1) special-status wildlife species, the California horned lark (*Eremophila alpestris actia*), was observed on the Project site. The species was observed foraging on the site and, based on the characteristics and quality of the habitat present on-site, is unlikely to nest on the site. The California horned lark is not listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS) but is listed on the California Department of Fish and Wildlife (CDFW) "Watch List." (L&L, 2018a, pp. 17, 21) No other special-status wildlife or sensitive wildlife species were observed on the Project site (L&L, 2018a, p. 18).

Based on the condition of the Project site and the habitat observed on and near the site, L&L determined that one (1) other special-status wildlife species, the loggerhead shrike (*Lanius ludovicianus*), has moderate potential to occur on the Project site, although the species was not observed on the site during the biological field surveys. (L&L, 2018a, p. 18)

The site is located in a County of San Bernardino Development Code biotic resource overlay for burrowing owl (*Athene cunicularia*; California Department of Fish and Wildlife [CDFW] Species of Special Concern). Though the site is located within the biotic resource overlay, the quality of the site's habitat is low and no burrowing owls were observed during the focused surveys conducted on the Project site in July 2017 or during the 2018 survey season. The burrowing owl's potential to occur on site is low due to the presence of occupied residences on-site, ongoing ground disturbances (i.e., disking) and surrounding development. (L&L, 2018a, p. 21)

No suitable habitat for the Delhi sands flower-loving fly (DSFF) is present on the project site. (L&L, 2018, p. 5)

D. Nesting Birds

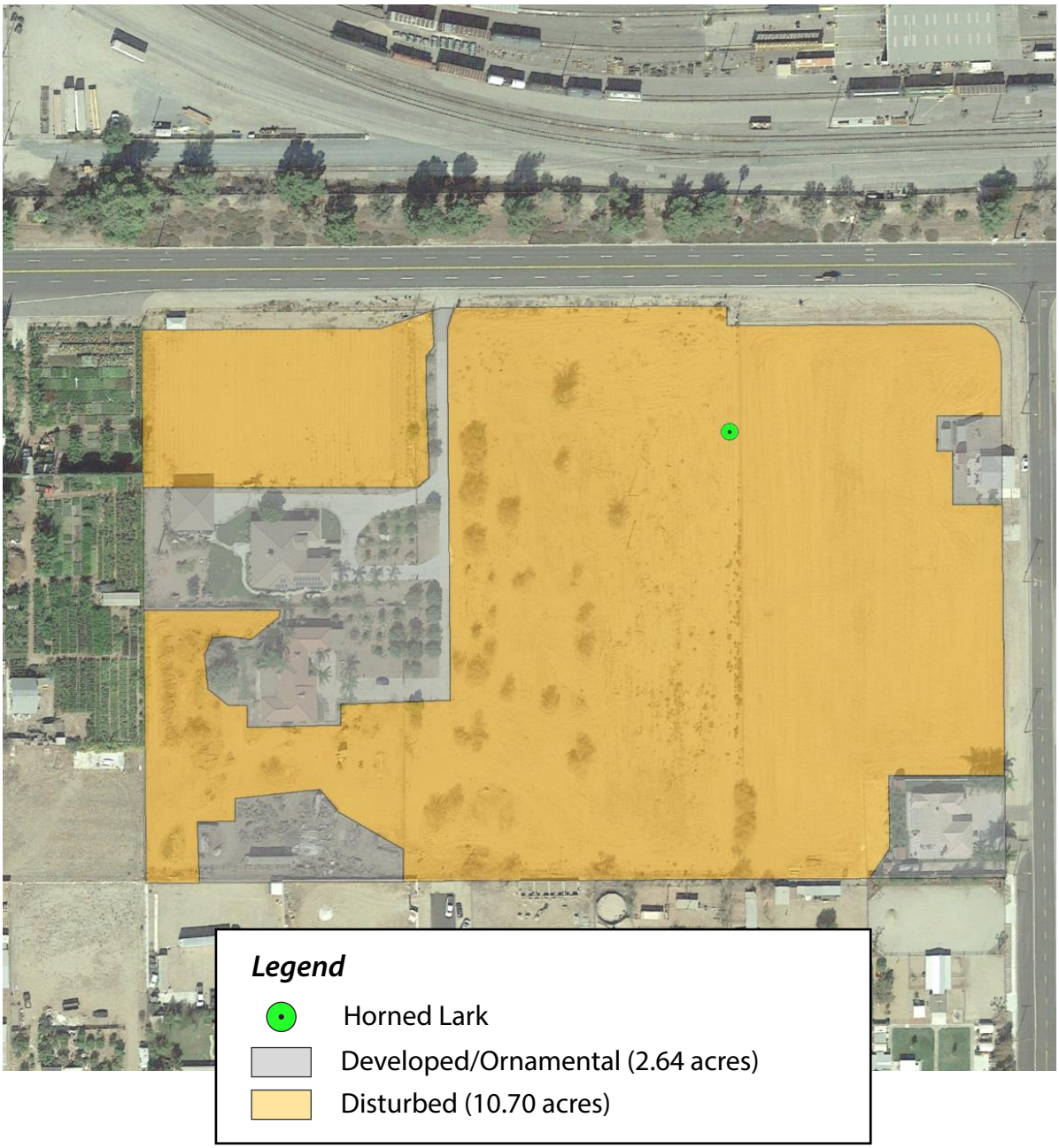
No nests were observed on the Project site; however, the site includes trees, ornamental vegetation, and open ground that can provide foraging and nesting habitat for songbirds. Given the existing level of ground disturbance and development, the potential for foraging or nesting by raptors is low. To date, no nesting birds have been observed on the site during field surveys. (L&L, 2018a, p. 21)

E. Jurisdictional Waters and Wetlands

The Project site does not support any drainages, water courses, vernal pools, or wetland habitats that would be under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW), and/or the Regional Water Quality Control Board (RWQCB) (L&L, 2018a, p. 22).

4.3.2 Applicable Environmental Plans, Policies, and Regulations

The Project site is subject to State of California (hereafter, "State") and federal regulations that were developed to protect natural resources, including: State- and federally-listed plants and animals; aquatic resources, including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species that are not listed as threatened or endangered by the State or federal governments; and other special-status vegetation communities. Provided below is an overview of the federal, State, and regional laws, regulations, and requirements that are applicable to the Project site based on its location and the biological resources observed on the site by L&L.



Source(s): L&L Environmental, Inc. (September 2018)

Figure 4.3-1

Not to Scale

Vegetation/Habitat Map

A. Federal Plans, Policies, and 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 U.S. Fish and Wildlife Service (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, 2013)

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. (USFWS, 2013)

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. During consultation, the "action" agency receives a "biological opinion" or concurrence letter addressing the proposed action. In the relatively few cases in which the USFWS or NMFS makes a jeopardy determination, the agency offers "reasonable and prudent alternatives" about how the proposed action could be modified to avoid jeopardy. It is extremely rare that a project ends up being withdrawn or terminated because of jeopardy to a listed species. (USFWS, 2013)

Section 10 of the ESA may be used by landowners including private citizens, corporations, tribes, states, and counties who want to develop property inhabited by listed species. Landowners may receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to avoid, minimize, and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat and by addressing economic development with a focus on species conservation. (USFWS, 2013)

2. 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, 2017)

B. State Plans, Policies, and 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 California Department of Fish and Wildlife (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, 2018b)

Section 2081 subdivision (b) of the California Fish and Game Code (CFGC) 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). (CDFW, 2018b)

If a species is listed by both the federal ESA and CESA, CFGC 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. (CDFW, 2018b)

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. SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species. California SHAs are analogous to the federal safe harbor agreement program and CDFW has the authority to issue a consistency determination based on a federal safe harbor agreement. (CDFW, 2018b)

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. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in number significantly. (CDFW, 2018c)

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 U.S. Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP participants. (CDFW, 2018c)

3. 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, 2017d)

4. 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."

C. Local Plans, Policies, and Regulations

1. San Bernardino County Development Code, Chapter 82.11 Biotic Resources (BR) Overlay

The San Bernardino County Development Code implements the goals and policies of the General Plan by regulating land uses within the unincorporated areas of the County. The Development Code's Biotic Resources Overlay implements General Plan policies regarding the protection and conservation of beneficial rare and endangered plant and animal resources and their habitats. The Project site is located in a Biotic Resources Overlay area for burrowing owl habitat.

For property within the Biotic Resources Overlay areas, Chapters 82.11 and 82.19 of the Development Code require that proposed new land uses or increases of more than 25 percent to existing land uses include a biological resources report prepared by a qualified biologist. The biological resources report shall identify all biotic resources located on the site and those on adjacent parcels that could be impacted by the proposed development, and shall also identify mitigation measures designed to reduce or eliminate impacts to the identified resources. The Development Code also states that the County's Conditions of Approval for the project shall incorporate the mitigation measures from the biological report. (County of San Bernardino, 2018a)

4.3.3 THRESHOLDS OF SIGNIFICANCE

Environmental impacts to biological resources are assessed using impact threshold criteria, which reflect the policy statement contained in CEQA § 21001(c) of the Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California to:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

In the development of thresholds of significance for impacts to biological resources, CEQA provides guidance primarily in § 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. CEQA Guidelines § 15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species ..."*

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including: candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and, adopted Habitat Conservation Plans (HCPs). This is done in the form of a checklist of questions to be answered during the Initial Study leading to the preparation of the appropriate environmental documentation for a project (i.e., Negative Declaration, Mitigated Negative Declaration, or EIR). Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds in an EIR. Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following conditions would result from implementation of the proposed Project.

a. *Have a substantial adverse effect, either directly 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;*

b. *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;*

c. *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;*

d. *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;*

e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or*

f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

4.3.4 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?***

A. Direct Impacts to Special-Status Plants

No special-status plants were observed on the Project site by L&L biologists during field surveys. Furthermore, due to the disturbed nature of the Project site and lack of natural plant communities thereon, the site does not have potential to support special-status plant species known to occur in the general Project area. (L&L, 2018a, pp. 25, 45-52) Impacts to special-status plant species would be less than significant, and mitigation is not required.

B. Direct Impacts to Special-Status Wildlife

One special-status wildlife species, the California horned lark, was observed foraging in disturbed habitat on the Project site and another species, loggerhead shrike, has moderate potential to forage and nest on the Project but was not observed.

The loss of approximately 13.3 acres of developed and disturbed habitat on the Project site would reduce the availability of nest/den sites and foraging habitats for the California horned lark and loggerhead shrike. However, there is ample existing trees and other ornamental vegetation in the Project vicinity, as well as disturbed habitat in adjacent underdeveloped/vacant lots. Additionally, large areas of conserved open space that could support the California horned lark and loggerhead shrike are located in a regional park approximately two miles southwest of the site (Jurupa Hills Regional Park, 861 acres). Accordingly, implementation of the Project would not result in a substantial adverse effect on the ability of the California horned lark or loggerhead shrike to nest and forage in the Project region. (L&L, 2018a, p. 26) Impacts would be less than significant and mitigation is not required.

Although no burrowing owl individuals or signs of burrowing owl use were observed on the Project site during surveys conducted by L&L, the burrowing owl is a nomadic species and the subject property contains marginally-suitable habitat for the species. (L&L, 2018a, pp. 26-27) Accordingly, there is the potential for the species to occupy the Project site prior to the start of construction. If burrowing owls are present on the Project site at the time construction activities commence, potential impacts to the species would be significant and mitigation would be required.

C. Indirect Impacts to Special-Status Biological Resources

The Project site is surrounded by paved roads and residential, commercial, and industrial developments, and the West Colton Yard and is not contiguous with any areas of native habitat. No listed or special-status plant or wildlife species are known or likely to occur within the developed areas adjacent to the Project site. (L&L, 2018a, pp. 25, 27) Due to the lack of natural, undisturbed habitat surrounding the Project site and the unlikely presence of listed or special-status plant or wildlife species in areas abutting the site, the Project would not result in indirect impacts to listed or special-status biological resources.

Threshold 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?***

None of the habitat types within the Project impact area are classified as riparian habitats, nor are these habitats identified as sensitive natural communities in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. (L&L, 2018a, p. 24) Accordingly, the Project has no potential to result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. No impact would occur and mitigation is not required.

Threshold 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?***

The Project site does not contain any protected wetland or aquatic resources, including, but not limited to, natural drainages or water courses, wetland habitat, marsh, vernal pools, or coastal resources (L&L, 2018a, p. 22). Therefore, the Project would not result in a substantial adverse effect on State- or federally-protected wetlands through direct removal, filling, hydrological interruption, or other means. No impact would occur and mitigation is not required.

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 migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

The Project site does not contain natural, surface drainage or ponding features. Additionally, there are no water bodies on or adjacent to the Project site that could support fish. (L&L, 2018a, p. 20) Therefore, there is no potential for the Project to interfere with the movement of native resident 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 (L&L, 2018a, pp. 23, 29). Therefore, there is no potential for the Project to impede the use of a native wildlife nursery site. Based on the foregoing information, the Project would result in no impact to native resident or migratory fish, established wildlife corridor, or native wildlife nursery sites.

The Project would remove vegetation (i.e. ornamental trees, shrubs, and groundcover) from the subject property that has the potential to provide roosting and nesting habitat for songbirds, including migratory species. No active nests were observed within the Project site during field surveys. However, because the Project site includes vegetation suitable for bird nesting, there is the potential for nesting birds to be present at the time Project construction commences (L&L, 2018a, p. 28). If active nests are present within the Project impact area during construction, the Project could result in substantial, adverse effects to biological resources (i.e., bird nests) that are protected by the MBTA and California Fish and Game Code. The Project's potential to impact nesting birds is a significant impact for which mitigation is required.

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

The Project site is located in the San Bernardino County Development Code's Biotic Resources Overlay area for the burrowing owl. In accordance with the requirements of the Biotic Resources Overlay, the Project site was assessed for the presence of habitat that could be used by the burrowing owl and, because marginally-suitable habitat for the species was observed on the Project site, a focused burrowing owl survey was performed for the Project site (and incorporated into *Technical Appendix C*). The results of the Project site's burrowing owl survey and potential Project-related impacts to the species were discussed under Threshold "a." The burrowing owl assessment performed for the Project site conforms with the requirements of the Biotic Resources Overlay, and implementation of the Project would not conflict with any applicable provision of the Biotic Resources Overlay.

The County of San Bernardino does not have any additional policies or ordinances in place to protect biological resources that are applicable to the Project.

Threshold 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?***

The Project site is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan (L&L, 2018a, p. 29). Therefore, no impact would occur.

4.3.5 Cumulative Impact Analysis

This cumulative impact analysis for biological resources considers development of the proposed Project in conjunction with other development projects in the vicinity of the Project site as well as full General Plan buildout of the unincorporated community of Bloomington as well as the cities of Fontana, Rialto, Colton, and Jurupa Valley.

The Project site does not contain any special-status plant species. Therefore, the Project would not impact any special-status plant species and there is no potential for the Project to contribute to a cumulative impact to special-status plant species.

Development of the Project site would cumulatively contribute to the loss of nesting and foraging habitat for the California horned lark and loggerhead shrike. However, there is ample habitat surrounding the Project site and large, permanent open space areas (specifically including the Jurupa Hills Regional Park) located in relative proximity to the Project site that provide high quality habitat for the species. As a result, the loss of a relatively small area of low-quality habitat for the California horned lark and loggerhead shrike would not be cumulatively considerable impact on the species. (L&L, 2018a, pp. 26, 32) Although the burrowing owl species was not observed on the Project site during field surveys, there is the potential for this species to occupy the property prior to commencement of Project construction. The burrowing owl is commonly found within the Project vicinity; as such, it is reasonable to conclude that impacts to the burrowing owl habitat would occur in conjunction with development of other properties in the cumulative study area. Thus, the Project has the potential to contribute to a cumulatively-considerable impact to the burrowing owl.

The Project would not impact any riparian or sensitive natural communities; therefore, there is no potential for the Project to contribute to a cumulatively-considerable impact to this resource.

The Project would not impact any State-protected or federally-protected wetlands. Accordingly, the Project has no potential to contribute to a cumulatively-considerable impact to State or federally protected wetlands.

The Project would remove vegetation that has the potential to support nesting birds protected by federal and State regulations. 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. However, the Project – like all other development activities in the cumulative study area – would be required to comply with State and federal law to preclude impacts to nesting birds. Mandatory compliance with State law would ensure that cumulative considerable impacts to nesting birds would be less than significant.

The Project would not conflict with any local policies or ordinances protecting biological resources. Other development projects in the cumulative study area would be required to comply with applicable local policies and/or ordinances related to the protection of biological resources as a standard condition of review/approval. Because the Project and cumulative development would be prohibited from violating applicable, local policies or ordinances related to the protection of biological resources, a cumulatively-considerable impact would not occur.

The Project impact area is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Because there is no conservation plan applicable to the Project impact area, there is no potential for the Project to contribute to the violation of a conservation plan. No cumulative impact would occur.

4.3.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project site contains habitat that is suitable for the burrowing owl and there is the potential that the burrowing owl could migrate onto the property before Project construction commences; in this event, potential impacts to the burrowing owl would be significant on a direct and cumulatively-considerable basis. The Project would have no substantial impact, either directly or through habitat modifications, on any other candidate, sensitive, or special-status plant or wildlife species.

Threshold b: No Impact. The Project impact area does not contain riparian and/or other sensitive natural habitats; therefore, the Project would have no impact on riparian or other sensitive habitats as classified by the CDFW or USFWS.

Threshold c: No Impact. No State- or federally-protected wetlands are located within the Project impact area; therefore, no impact to wetlands would occur.

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.

Threshold e: No Impact. The Project would not conflict with any local policies or ordinances protecting biological resources.

Threshold f: No Impact. The Project impact area is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, no impact would occur.

4.3.7 MITIGATION

The following mitigation measures would address the Project's potential to impact the burrowing owl and nesting migratory birds.

MM 4.3-1 Within 30 days prior to grading, a qualified biologist shall conduct a survey of suitable habitat on site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the County of San Bernardino prior to the issuance of a grading permit and subject to the following provisions:

a) In the event that the pre-construction survey identifies no burrowing owls on the property a grading permit may be issued without restriction.

b) In the event that the pre-construction survey identifies the presence of the burrowing owl on the Project site, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.

MM 4.3-2 Vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (January 1 through September 1), unless a migratory bird nesting survey is completed in accordance with the following requirements:

a) A migratory bird nesting survey of the Project site, including suitable habitat within a 500-foot radius, shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing or ground disturbance.

b) A copy of the migratory nesting bird survey results report shall be provided to the County of San Bernardino. If the survey identifies the presence of active nests, then the qualified biologist shall provide the County with a copy of maps showing the location of all nests and a species-appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the County and shall be no less than a 100-foot radius around the nest for non-raptors

and no more than a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked 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 County concurrence verify that the nests are no longer occupied and juvenile birds can survive independently from the nests.

4.3.8 Significance of Impacts After Mitigation

Threshold a: Less-than-Significant Impact with Mitigation. Implementation of MM 4.3-1 would ensure that pre-construction surveys are conducted for the burrowing owl to determine the presence or absence of the species on the Project site. If present, the mitigation measure provides performance criteria that requires avoidance and/or relocation of burrowing owls in accordance with CDFW protocol. With implementation of the required mitigation, potential direct and cumulatively-considerable impacts to the burrowing owl would be reduced to below a level of significance.

Threshold d: Less-than-Significant Impact with Mitigation. Implementation of Mitigation Measure MM 4.3-2 would ensure that pre-construction surveys are conducted for nesting birds protected by the federal MBTA during the breeding season to determine presence or absence prior to disturbance of habitat with the potential to support nesting birds. If 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 and cumulatively-considerable impacts to nesting birds protected by the federal MBTA would be reduced to below a level of significance.

4.4 CULTURAL RESOURCES

The analysis in this Subsection is based, primarily, on a report prepared by L&L Environmental, Inc. (hereafter, "L&L"), titled "Phase 1 Cultural Resources Assessment for the Slover and Cactus Avenue Warehouse Project," dated June 14, 2018, and included as *Technical Appendix D* to this EIR (L&L, 2018b). Information used to support the analysis in this Subsection also was obtained from the Conservation Element of the County of San Bernardino General Plan (County of San Bernardino, 2014, p. V-8), and the Cultural and Paleontological Resources section (County of San Bernardino, 2007, pp. 60-66) of the certified Final Program EIR for the County of San Bernardino General Plan (SCH No. 2005101038), dated February 2007.

Confidential information has been redacted from *Technical Appendix D* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of San Bernardino, and L&L is considered confidential in respect to places that may 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)).

Refer to Section 7.0, *References*, for a complete list of reference sources.

4.4.1 EXISTING CONDITIONS

A. Prehistoric Resources

1. Regional Setting

The Project site is located within the unincorporated community of Bloomington in the southwest portion of San Bernardino County. The Early Period, Millingstone Period, Intermediate Period, and Late Prehistoric Period are the four (4) general prehistoric cultural periods represented in San Bernardino County, as summarized briefly below. Refer to *Technical Appendix D* for a more detailed discussion about the prehistoric cultural periods in San Bernardino County.

- Early Period (before 6,000 B.C.): Very few sites from the Early Period exist, especially in inland areas. Of the Early Period sites that have been excavated and dated, most exhibit a refuse assemblage suggesting short-term occupation. Such sites have been detected in caves and around fluvial lakes fed by streams that existed near the end of the last glaciation. Chipped stone tools at these sites are surmised to reflect a specialized tool kit used by hunters; large-stemmed bifaces are common. (L&L, 2018b, p. 7)

- Millingstone Period (6,000 to 3,000 B.C.): Characterized by the appearance of handstones and millingstones, the onset of the Millingstone Period appears to correspond with an interval of warm and dry weather known as the Altithermal. Artifact assemblages begin to reflect an emphasis on plant foods and foraging subsistence systems, as evidenced by the grinding tools

found at these sites. Assemblages also include choppers and scraper planes; however, there is a reduced number of large bifaces. Sites are occupied for a greater duration than Early Period sites, based on an increase in occupational debris. The distribution of Millingstone Period sites reflects the theory that groups may have followed a modified central-based wandering settlement pattern. In this semi-sedentary pattern, a base camp would have been occupied for a portion of the year, but small population groups seasonally occupied subsidiary camps in order to exploit resources not generally available near the base camp. (L&L, 2018b, p. 8)

- Intermediate Period (3,000 B.C. to A.D. 500): The Intermediate Period represents a slow technological transition, which is presumably related to the slowly drying and warming climate. Site artifact assemblages retain many attributes of the Millingstone Period. Technologically, these sites are difficult to distinguish from earlier sites in the absence of radiometric dates. These sites generally contain a reduced number of large-stemmed or notched projectile points, but there is an increase in portable mortars and pestles. The lack of large points, combined with the mortars and pestles, suggest that the indigenous populations may have preferred harvesting, processing, and consuming acorns and other seeds over hunting. Due to a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this period are well understood. It has been proposed by some researchers that group sedentism increased with the exploitation of storable, high-yield plant food resources, such as acorns. The duration and intensity of occupation at base camps increased during this period, especially in the later part of the period. (L&L, 2018b, p. 8)

- Late Prehistoric Period (A.D. 500 to A.D. 1769): The Late Prehistoric Period reflects an increased sophistication and diversity in technology. Cultural complexes appeared that have modern ethnographic counterparts and occupation sites consisted of major villages with cemeteries, as well as "special purpose" and seasonal sites. Late assemblages characteristically contain small projectile or dart points, which imply the use of the bow and arrow. Use of bedrock milling stations is purported to have been widespread during this period, as it was in the previous period. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources. Desert series projectile points, buffware and brownware ceramics, shell, steatite beads, slate pendants, incised stones, and milling tools constitute the tool assemblage. Regional differences, such as Cottonwood Projectile Points, were common and the use of obsidian increased in some areas and decreased in others. (L&L, 2018b, pp. 8-9)

2. Project Site Conditions

L&L conducted an intensive pedestrian survey of the Project site on April 4, 2018. The pedestrian survey consisted of a series of north-south tending transects, spaced at approximately 10-meter intervals, which covered the entire Project site. No prehistoric resource sites or isolates were identified on the Project site during the pedestrian survey. (L&L, 2018b, p. 40)

L&L also reviewed an archaeological records search conducted by the South Central Coastal Information Center (SCCIC) at California State University (CSU), Fullerton. The records search provided information regarding previous archaeological studies in the Project area and any previously recorded sites within a one-mile radius of the Project site. The results of this records search indicate that two (2) prehistoric sites were previously located within a one-mile radius of the site but no prehistoric artifacts were previously recorded on the Project site (L&L, 2018b, p. 25).

B. Historical Resources

1. Regional Setting

The general historical setting for the southern California region and the County of San Bernardino is summarized below. Refer to *Technical Appendix D* for a more detailed discussion of the local historic setting.

European settlement of southern California began with a Spanish colonizing expedition in 1769. The first Europeans in the Inland Empire area were part of an expedition to locate deserting soldiers. The expedition traveled through the foothills of the San Jacinto Mountains, continued into the Anza Valley, the San Jacinto Valley, and eventually into San Bernardino and Cajon Pass. Although none of the 21 missions established by the Spanish between San Diego and Sonoma were located in San Bernardino County, lands within the southwestern portion of modern San Bernardino County were utilized for agriculture and pasturage under the supervision of the Mission San Gabriel. Beginning in the late 18th century, Spanish missions began establishing Ranchos for the purpose of expanding their agricultural holdings. The Bloomington area and much of the San Bernardino Valley was affiliated with the Rancho San Bernardino, which was established by the Mission San Gabriel in 1819. (L&L, 2018b, p. 13)

In 1821, Mexico achieved independence from Spain and California became an outpost of the Mexican Republic. Following Mexican independence, and over a period of a decade, mission holdings and former mission lands were transferred to prominent Mexican families. The San Bernardino and Yucaipa Valleys were awarded to the Lugo family in 1842 as part of a land grant from the Mexican government. (L&L, 2018b, p. 14)

In 1846, war broke out between Mexico and the United States and ended in 1848 with the signing of the Treaty of Guadalupe Hidalgo. Upon signing of the Treaty, the region was annexed as a territory of the United States and, in 1850, California became a state which sparked an influx of settlers into the region, including gold miners, entrepreneurs, health-seekers, speculators, politicians, adventurers, those who sought religious freedom, and individuals who desired to create utopian societies. During this time period, the Mexican ranchos were subdivided or sold. (L&L, 2018b, p. 14)

Some of the first settlers in the San Bernardino Valley were several hundred Mormon pioneers. They arrived in the area in 1851 and purchased the entire Rancho San Bernardino. The Mormon pioneers founded the townsite of San Bernardino and established a prosperous farming community. The settlement was recalled in 1857 and their lands were divided and sold. By the latter portion of the

19th century, railway companies expanded their alignments into the area. In 1875, the Southern Pacific Railroad (currently the Union Pacific Railroad) was constructed across the San Bernardino Valley eastward from Los Angeles. The railroad was especially important to the development of the San Bernardino Valley, as the ability to transfer citrus and other crops led to an economic and population explosion that resulted in the commercialization of citrus production. In 1887, the Semi-Tropic Land and Water Company purchased a large tract of land and laid out the townsites of Rialto, Bloomington, and Rosena. Rialto and Bloomington grew slowly, while Rosena (the modern downtown Fontana area) experienced limited development until the mid-20th century. (L&L, 2018b, pp. 14-15)

2. Project Site Conditions

L&L conducted a pedestrian survey of the Project site and reviewed historical records databases to identify the presence or absence of historical resources on the Project site.

Under existing conditions, the Project site contains four (4) modern residences with associated outbuildings and one (1) unrecorded historic site (SCA-1), which comprises a collection of artifacts that reflect the historic use of the Project site for citrus production. SCA-1 consists of remains of an irrigation or water conveyance system, two (2) windmills, and two (2) small refuse scatters. All of the structures on the Project site are relatively modern (constructed circa 1994) and do not contain any unique, distinctive features, and are not associated with any important historic figures or events. (L&L, 2018b, p. 45)

Based on archival research, 38 historic resources are located within a one-mile radius of the Project site; none of which are located – or previously located – on the Project site (L&L, 2018b, p. 32). Refer to *Technical Appendix D* for additional information about the results of archival research.

4.4.2 Applicable Environmental Plans, Policies, and Regulations

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 Plans, Policies, and 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." (ACHP, 2016)

NHPA and related legislation sought a partnership among the federal government and the states that would capitalize on the strengths of each. The federal government, led by the National Park Service (NPS) provides funding assistance; basic technical knowledge and tools; and a broad national perspective on America's heritage. The states, through State Historic Preservation Officers (SHPOs) appointed by the Governor of each state, would provide matching funds, a designated state office, and a statewide preservation program tailored to state and local needs and designed to support and promote state and local historic preservation interests and priorities. (ACHP, 2016)

An Advisory Council on Historic Preservation, the first and only federal entity created solely to address historic preservation issues, was established as a cabinet-level body of Presidentially-appointed citizens, experts in the field, and federal, state, and local government representatives, to ensure that private citizens, local communities, and other concerned parties would have a forum for influencing federal policy, programs, and decisions as they impacted historic properties and their attendant values. (ACHP, 2016)

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 ACHP 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. (ACHP, 2016)

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. (ACHP, 2016)

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, n.d.)

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance, as follows:

- Age and Integrity. Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?

- Significance. Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archeological investigation about our past? (NPS, n.d.)

Nominations can be submitted to a 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, n.d.)

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, n.d.)

3. 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, 2016)

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, 2016)

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, 2016)

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, 2016)

B. State Plans, Policies, and 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."

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."

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. Lastly, HSC §§ 8010-8011 establish the California Native American Graves Protection and Repatriation Act consistent with the federal law addressing the same. The Act stresses that "all California Indian human remains and cultural items are to be treated with dignity and respect." It encourages voluntary disclosure and return of remains and cultural items by publicly funded agencies and museums in California. It also outlines the need for aiding California Indian tribes, including non-federally recognized tribes, in filing repatriation claims.

5. California Code of Regulations Section 15064.5

The California Code of Regulations, Title 14, Chapter 3, § 15064.5 (the State 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:

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.

C. *Local Plans, Policies, and Regulations*

1. County of San Bernardino Municipal Code, Title 8

The County of San Bernardino Municipal Code defines Cultural Resources Preservation (CP) Overlays and is intended to provide the identification and preservation of important archaeological resources. The CP Overlay may be applied to areas where archaeological and historic sites that warrant preservation are known or are likely to be present. The County requires that a proposed project within the CP Overlay includes a report determining the presence or absence of archaeological and/or historical resources on the project site. The Project site is not located within the CP Overlay (County of San Bernardino, 2014).

4.4.3 Basis for Determining Significance

The proposed Project would 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 pursuant to § 15064.5 of the CEQA Guidelines;*

b. *Cause substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines; or*

c. *Disturb any human remains, including those interred outside of dedicated cemeteries.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to cultural resources that could result from development projects.

4.4.4 Impact Analysis

Threshold a: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

To implement the Project, the Project Applicant would demolish all four (4) primary residential structures and associated outbuildings located on the Project site under existing conditions. As described under Subsection 4.4.1B.2, the structures located on the Project site are of relatively modern construction, do not contain any unique or distinctive architectural elements, and are not particularly unique or representative of the time period in which they were constructed or utilized. Based on the foregoing observations, L&L concluded that none of the structures located on the Project site qualify as a historical resource (L&L, 2018b, pp. 34, 44). Thus, there would be no impact to historical resources resulting from the demolition and removal of these structures.

One (1) assemblage of historic features/artifacts (SCA-1) was observed on the Project site. SCA-1 consists of an irrigation or water conveyance system, two (2) windmills, and two (2) small refuse scatters, which were likely associated with the historic citrus production on the Project site. The

detected features and artifacts are generally in fair to poor condition and the citrus groves and windrows have been removed from the site. Additionally, some of the features exhibit modern materials that compromise the historic integrity of the site, such as a well pump that utilizes a polyvinyl chloride (PVC) pipe. Furthermore, these features represent remnants of historic agricultural infrastructure that are ubiquitous on former grove lands throughout southern California. For these reasons above, this site does not retain sufficient integrity to be considered eligible for inclusion in the California Register of Historical Resources (CRHR), and its removal would represent a less-than-significant impact. (L&L, 2018b, p. 42)

Accordingly, implementation of the Project has no potential to result in a substantial adverse change to any historical resource as defined by California Code of Regulations § 15064.5.

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

L&L conducted a cultural resources inventory of the Project site, which included a records search with the SCCIC at CSU Fullerton and an intensive pedestrian survey of the site. According to the archival records search, no prehistoric resources have been previously recorded on the Project site. Furthermore, due to the site's historic use for citrus groves (which have resulted in severely impacted/disturbed ground conditions), the likelihood of discovering buried prehistoric archaeological resources on the Project site is considered moderate to low (L&L, 2018b, p. 45). Regardless of L&L's determination, the County is obligated to consider all sources of information in rendering a conclusion of potential significance. Two (2) Native American Tribes with traditional use areas that encompasses the Project site indicated to the County during the SB 18 and AB 52 consultation processes for this EIR (refer to Subsection 4.13, *Tribal Cultural Resources*) that tribal cultural resources - which also may be classified as significant prehistoric archaeological resources, as defined in CCR § 15064.5 - have the potential of being unearthed during the Project's construction activities (L&L, 2018b, p. iv). Accordingly, although considered unlikely, implementation of the Project during ground disturbing construction activities is determined to have the potential to impact prehistoric archaeological resources that may be buried beneath the Project site. If any prehistoric resources that may be buried beneath the Project site met the definition from California Code of Regulations § 15064.5, impacts to prehistoric archaeological resources would be significant.

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

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. (L&L, 2018b, Appendix F) Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction.

If human remains are unearthed during Project construction, the construction contractor would be required by law to comply with California Health and Safety Code § 7050.5 "Disturbance of Human Remains." According to § 7050.5(b) and (c), if human remains are discovered, the County Coroner must be contacted and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner is required to contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. Pursuant to California Public Resources Code § 5097.98, whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, the NAHC is required to immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code § 5097.94(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials. With mandatory compliance to California Health and Safety Code § 7050.5 and Public Resources Code § 5097.98, any potential impacts to human remains, including human remains of Native American ancestry, that may result from development of the Project would be less than significant.

4.4.5 Cumulative Impact Analysis

The potential for implementation of the Project to contribute to cumulative impacts to historical resources was analyzed in conjunction with other projects located in areas that were once similarly influenced by the historical agricultural industry of the County of San Bernardino and the region. Record searches and field surveys indicate the absence of significant historical sites and resources on the Project site; therefore, implementation of the Project has no potential to contribute towards a significant cumulative impact to historical sites and/or resources.

The potential for Project construction to result in cumulatively-considerable impacts to prehistoric archaeological resources were also analyzed in conjunction with other projects located in the traditional use areas of Native American tribes that are affiliated to the Project site. Development activities on the Project site would not impact any known prehistoric archaeological resources and the likelihood of uncovering previously unknown prehistoric archaeological resources during Project construction are moderate to low due to the magnitude of disturbance that has occurred on the site due to historic citrus grove production. Nonetheless, the potential exists for subsurface prehistoric archaeological resource that meet the CCR § 15064.5 definition of a significant archaeological resource to be discovered on the Project site – and other development project sites in the region – during construction activities. Accordingly, the Project has the potential to contribute to a significant cumulative impact to prehistoric archaeological sites and/or resources. Therefore, the Project would

result in a cumulatively-considerable impact to prehistoric archaeological resources for which mitigation is required.

Mandatory compliance with the provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097 *et seq.*, would assure that all future development projects within the region treat human remains that may be uncovered during development activities in accordance with prescribed, respectful and appropriate practices, thereby avoiding significant cumulative impacts.

4.4.6 Significance Before Mitigation

Threshold a: Less-than-Significant Impact. One (1) historic assemblage site is present on the Project site; however, the site is not eligible for inclusion in the CRHR and is not considered a significant historical resource. The Project would remove the assemblage, which is not a historical resource pursuant to § 15064.5.

Threshold b: Significant Direct and Cumulatively-Considerable Impact. No known prehistoric resources are present on the Project site and the likelihood of uncovering buried prehistoric resources on the Project site is moderate to low due to the magnitude of historic ground disturbance on the Project site (resulting from citrus grove production). Nonetheless, the potential exists for Project-related construction activities to result in a direct and cumulatively-considerable impact to significant subsurface prehistoric archaeological resources should such resources to be discovered during Project-related construction activities.

Threshold c: Less-than-Significant Impact. In the unlikely event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 and California Public Resources Code § 5097 *et seq.* Mandatory compliance with State law would ensure that human remains, if encountered, are appropriately treated and would preclude the potential for significant impacts to human remains.

4.4.7 Mitigation

The following mitigation measures would address the potential for Project construction to impact significant prehistoric archaeological resources that may be present beneath the Project site and may be discovered during ground-disturbing construction activities. Also, refer to the mitigation measures presented in Subsection 4.13, *Tribal Cultural Resources*.

MM 4.4-1 Prior to the issuance of a grading permit, the Project Applicant/Developer or Project Archaeologist shall provide evidence to the County of San Bernardino that a Cultural Resources Monitoring Plan (CRMP) has been developed to guide the procedures and protocols of an archaeological monitoring program to be implemented during Project construction. The CRMP shall outline the identification and treatment procedures that must be followed if archaeological resources are discovered that meet the definition of a significant cultural resource pursuant to CEQA Guidelines § 15064.5.

Such procedures may include, but not be limited to data collection, recordation, and curation.

MM 4.4-2 Prior to the issuance of a grading permit, the Project Applicant/Developer shall provide evidence to the County of San Bernardino that a qualified archaeologist (herein, "Project Archaeologist") with at least 3 years of regional experience in archaeology has been retained to conduct prehistoric archaeological monitoring during earthmoving activities on-site and excavation activities within the Project site. The Project Archaeologist shall be present on-site to monitor all ground-disturbing activities until the Project Archaeologist determines that the archaeological sensitivity of the Project's disturbance area has been reduced to low (e.g., due to soil composition, level of disturbance). Should the Project Archaeologist determine that there are no archaeological resources within the Project's disturbance area or should the archaeological sensitivity be reduced to low during construction activities, archaeological monitoring activities shall cease. If resources are discovered, the procedures outlined in the CRMP shall be followed.

MM 4.4-3 Prior to the issuance of a Certificate of Occupancy, the Project Archaeologist shall submit a report to the County of San Bernardino and the South Central Coast Information Center that summarizes the results of the prehistoric and historic archaeological monitoring conducted during Project construction. The final report shall itemize any archaeological resources recovered, with maps to accurately record the original location of recovered resources, and provide evidence that the resources were donated to and accepted for curation by the San Bernardino County Museum or other accredited repository.

4.4.8 Significance of Impacts After Mitigation

Threshold b: Less-than-Significant Impact with Mitigation. Implementation of MM 4.4-2 through MM 4.4-3 would ensure the proper identification and subsequent treatment of any significant archaeological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. With implementation of the required mitigation, the Project's potential impact to significant archaeological resources would be reduced to less-than-significant.

4.5 ENERGY

The analysis in this Subsection is primarily based on a report prepared by Urban Crossroads, Inc. titled, "Slover and Cactus Warehouse Energy Analysis," dated April 26, 2019, that is included as *Technical Appendix E* to this EIR (Urban Crossroads, 2019d). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.5.1 EXISTING CONDITIONS

A. *Electricity Consumption*

Under existing conditions, the Project site is mostly vacant with the exception of four (4) single-family residences: two (2) on the western portion, one at the southeastern corner and one on the northeastern portion of the Project site. These homes consume a nominal amount of electricity. The Project site is located within the service area of Southern California Edison (SCE). SCE provides electricity to a population of more than 14 million within a service area encompassing approximately 50,000 square miles. SCE generates 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 and utilities, including out-of-state suppliers. (Urban Crossroads, 2019d, p. 9)

B. *Natural Gas Consumption*

As mentioned above in Subsection 4.5.1A, the Project site is mostly vacant with the exception of four (4) single-family residences that consume a nominal amount of natural gas, if any. The Project site is located within the service area of the Southern California Gas Company (SoCalGas) which is regulated by the California Public Utilities Commission (CPUC). The CPUC regulates natural gas utility service for approximately 10.8 million customers and oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State of California. Based on the most recent available public data, California customers receive 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. (Urban Crossroads, 2019d, pp. 10-11)

C. *Transportation Energy/Fuel Consumption*

Gasoline and other vehicle fuels are commercially-provided commodities. As of 2018, there were more than 27 million passenger and light truck vehicles and 8 million medium-duty and heavy-duty vehicles on the road in California. In 2018, California vehicles consumed nearly 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2016, California vehicles also consumed 194 million therms of natural gas as a transportation fuel, or the equivalent of 155 million gallons of gasoline. The Project site contains four (4) residences, that utilize vehicles that consume fuel. (Urban Crossroads, 2019d, p. 12)

4.5.2 Applicable Environmental Plans, Policies, and Regulations

A. Federal Policies and Regulations

1. Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. (Urban Crossroads, 2019d, p. 14)

2. The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of wise transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety. (Urban Crossroads, 2019d, p. 14)

B. State Policies and Regulations

1. Integrated Energy Policy Report

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations. The 2016 Integrated Energy Policy Report Update (2016 IEPR Update), focuses on next steps for transforming transportation energy use in California. The 2016 IEPR Update addresses the role of transportation in meeting state climate, air quality, and energy goals; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure deployment; measuring success and defining metrics within the Alternative and Renewable Fuel and Vehicle Technology Program; market transformation benefits resulting from Alternative and Renewable Fuel and Vehicle Technology Program investments; the state of hydrogen, zero-emission vehicle, biofuels, and natural gas technologies over the next ten years; transportation linkages with natural gas infrastructure; evaluation of methane emissions from the natural gas system and implications for the transportation system; changing trends in California's sources of crude oil; the increasing use of crude-by-rail in California; the integration of environmental information in renewable energy planning processes; an update on

electricity reliability planning for Southern California energy infrastructure; and an update to the electricity demand forecast. (Urban Crossroads, 2019d, p. 15)

2. State of California Energy Plan

The California Energy Commission (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 a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. (Urban Crossroads, 2019d, p. 15)

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. According to the CEC, the Energy Commission's energy efficiency standards have saved Californians billions in reduced electricity bills since 1977. (Urban Crossroads, 2019d, p. 16)

The newest 2016 version of Title 24 was adopted by the CEC and became effective on January 1, 2017. The CEC indicates that the 2016 Title 24 standards will reduce energy consumption by 5 percent for nonresidential buildings above that achieved by the 2013 Title 24. (Urban Crossroads, 2019d, p. 16)

4. 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.

5. Pavley Fuel Efficient Standards (AB 1493)

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, 2017)

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, 2017)

The 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 the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, 2017)

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 was 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, 2017)

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, 2017)

6. Advanced Clean Cars Program

In 2012, the California Air Resources Board (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 United States Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA), combined the control of smog-causing (criteria) pollutants and greenhouse gas (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, 2019d)

- 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. California Renewable Portfolio Standard (SB 1078 and SB 350)

SB 1078 requires electricity retailers to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020. Additionally, former Governor Edmund G. Brown, Jr. signed into legislation Senate Bill 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. The California Energy Commission (CEC) and the CPUC work collaboratively to implement the RPS. The CPUC implements and administers Renewable Portfolio Standards (RPS) compliance rules for California's retail sellers of electricity, which include investor-owned utilities (IOU), public owned utilities (POUs), electric service providers (ESP) and community choice aggregators (CCA). The CEC is responsible for the certification of electrical generation facilities as eligible renewable energy resources, and adopting regulations for the enforcement of RPS procurement requirements of POUs. In 2016, California's three large IOUs (Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric) collectively served 34.76% of their retail electricity sales with renewable power. The IOU's utilize a mix of RPS resources such a wind, solar PV, solar thermal, hydroelectricity, geothermal, and bioenergy to meet their renewable procurement targets. Southern California Edison (the IOU that provides electricity to the Project site) served 28% of their retail electricity sales with renewable power in 2016. (CEC, 2019; CPUC, 2019)

C. Local Policies and Regulations

1. County of San Bernardino Green Building Standards Code

In addition to the aforementioned federal and State regulations related to energy, the County of San Bernardino adopted the California Green Building Standards Code (2016 Edition). Accordingly, the County's Green Building Standards Code regulates and controls the design, construction, quality of materials, grading, use, occupancy, location, and maintenance of all buildings or structures within the County. (County of San Bernardino, 2019, § 63.1501)

4.5.3 Methodology for Calculating Project Energy Demands

Information from the CalEEMod 2016.3.2 outputs for the Project's air quality impact analysis (*Technical Appendix B1*) was utilized in the Project's energy analysis (*Technical Appendix E*) and the analysis presented herein, detailing Project-related construction equipment, transportation energy demands, and facility energy demands. These outputs are referenced in Appendices 3.1 through 3.3 of *Technical Appendix E*. Additionally, the 2014 version of the EMFAC model developed by the California ARB was used to calculate emission rates, fuel consumption, and VMT for light duty vehicles, light-heavy duty trucks, medium-heavy duty trucks, and heavy-heavy duty trucks traveling to and from the Project site during construction and operational activities. Data from the EMFAC 2014 model outputs are included in Appendix 3.4 of the Project's energy analysis (*Technical Appendix E*).

4.5.4 Basis for Significance

The proposed Project would result in a significant impact to energy if the Project or any Project-related component would:

a. *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or*

b. *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to energy that could result from development projects.

Regarding the determination of significance under Threshold "a," if energy consumed by the Project's construction and/or operation cannot be accommodated with existing available resources and energy delivery systems, and requires and/or consumes more energy than industrial uses in California of similar scale and intensity, the Project would result in wasteful, inefficient, or unnecessary consumption of energy.

4.5.5 Impact Analysis

Threshold a:	***Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

❑ **Energy Use During Construction**

The Project's construction process would consume electrical energy and fuel. Project-related construction would represent a "single-event" electric energy and fuel demand and would not require on-going or permanent commitment of energy or diesel fuel resources for this purpose. In summary, Project-related construction is estimated to consume approximately 94,008 kWh of electricity, approximately 51,432 gallons of diesel fuel from operation of construction equipment, 11,896

gallons of diesel fuel from construction vendor trips, and 14,369 gallons of fuel from construction worker trips. (Urban Crossroads, 2019d, pp. 19, 21-22) Refer to Subsection 4.3 from *Technical Appendix E* for detailed calculations of all components of the Project's construction energy use.

The equipment used for Project construction would conform to CARB regulations and State emissions standards. 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 elsewhere in the region; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Additionally, Project construction activities would be required to comply with State law (Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3)) and CARB Air Toxic Control Measures that place restrictions on the length of time that diesel-powered equipment and vehicles can idle before powering down (thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment). Lastly, Project construction contractors would be required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of older, less-efficient diesel off-road construction equipment. (Urban Crossroads, 2019d, p. 23) Accordingly, the equipment and vehicles employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Indirectly, the Project would realize construction energy efficiencies and energy conservation through the bulk purchase, transport and use of construction materials. 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. (Urban Crossroads, 2019d, p. 23)

As supported by the preceding discussion, the Project's construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

❑ Energy Use During Project Operations

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facility energy demands (energy consumed by building operations and site maintenance activities). Related to transportation energy demands, Project operational traffic is estimated to travel approximately 2,902,448 miles annually, which would result in the consumption of 243,034 gallons of fuel gallons of fuel. Related to facility energy demands, the proposed logistics warehouse buildings are estimated to consume 523,446 kilo-British thermal units (kBTU) per year of natural gas and 656,418 Kilowatt-hour (kWh) per year of electricity. (Urban Crossroads, 2019d, pp. 24-25, 28) Refer to Subsection 4.4 from *Technical Appendix E* for detailed calculations of all components of the Project's operational energy use.

The proposed Project entails conventional logistics warehouse uses that reflect contemporary energy efficient/energy conserving designs and operational programs (including enhanced building/utilities energy efficiencies mandated by the California Green Building Standards Code (CalGreen)). The Project, anticipated to begin construction in 2020, will be subject to compliance with CalGreen 2019 standards, which become effective on January 1, 2020, and mandate energy conservation features that are more stringent (energy-conserving) than prior versions of CalGreen. On this basis, the Project will inherently use less energy than comparable buildings constructed under prior versions of CalGreen. Project building operations would not result in the inefficient, wasteful, or unnecessary consumption of energy due to mandatory CalGreen compliance. Furthermore, the Project site is within the existing service areas of SCE and SoCal Gas and implementation of the Project would not cause or result in the need for additional energy facilities or energy delivery systems. From a transportation energy perspective, the Project site's location proximate to regional and local roadway systems would tend to reduce VMT within the region, acting to reduce regional vehicle energy demands. Furthermore, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. (Urban Crossroads, 2019d, pp. 27-28)

As supported by the preceding discussion, the Project's operational energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Threshold b: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The following section analyzes the Project's consistency with the applicable federal and State regulations previously described under Subsection 4.5.2, *Applicable Environmental Plans, Policies, and Regulations.*

❑ Consistency with Federal Energy Regulations

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

Transportation and access to the Project site is provided primarily by the local and regional roadway systems, which includes the I-10 Freeway, Slover Avenue, and Cactus Avenue. Implementation of the Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be realized pursuant to the ISTEA because SCAG is not planning for intermodal facilities on or through the Project site. (Urban Crossroads, 2019d, p. 14)

The Transportation Equity Act for the 21st Century (TEA-21)

The Project site is located along major transportation corridors with proximate access to the interstate freeway system (i.e., I-10 Freeway). The location of the Project site facilitates access, acts to reduce VMT, takes advantage of existing infrastructure systems, and promotes land use compatibilities through collocation of similar industrial uses. Accordingly, the Project supports the strong planning processes emphasized under TEA-21 and is therefore consistent with, and would not otherwise interfere with or obstruct implementation of TEA-21. (Urban Crossroads, 2019d, p. 14)

❑ Consistency with State Energy Regulations

Integrated Energy Policy Report

Electricity would be provided to the Project by SCE. SCE's Clean Power and Electrification Pathway (CPEP) white paper builds on existing State programs and policies that support the IEPR goals of improving electricity, natural gas, and transportation fuel energy use in California. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct implementation of the goals presented in the 2016 IEPR. (Urban Crossroads, 2019d, p. 15)

State of California Energy Plan

The Project site is located along Slover Avenue with proximate access to the I-10 Freeway. The location of the Project site facilitates access, acts to reduce VMT, and takes advantage of existing infrastructure systems. Therefore, the Project supports urban design and planning processes identified under the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan. (Urban Crossroads, 2019d, p. 15)

California Code Title 24, Part 6, Energy Efficiency Standards

The Project would design building shells and building components, such as windows; roof systems: electrical and lighting systems: and heating, ventilating, and air conditioning systems to meet 2019 Title 24 Standards. The Project also is required by State law to be designed, constructed, and operated to meet or exceed Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards. (Urban Crossroads, 2019d, p. 16)

Pavley Fuel Efficiency Standards (AB 1493)

AB 1493 is applicable to the Project because model year 2009-2016 passenger cars and light duty truck vehicles traveling to and from the Project site are required by law to comply with the legislation's fuel efficiency requirements. On this basis, the Project is determined to be consistent, with, and would not interfere with, nor otherwise obstruct implementation of AB 1493.

California Renewable Portfolio Standards (SB 1078)

Energy directly or indirectly supplied to the Project site by electric corporations is required by law to comply with SB 1078.

❑ Consistency with Local Energy Regulations

County of San Bernardino Green Building Standards Code

The Project site would be required by the County of San Bernardino to be designed, constructed, and operated to meet or exceed the County's Green Building Standards Code (Section 63.1501 of the County of San Bernardino Municipal Code). On this basis, the Project site is determined to be

consistent with, and would not interfere with, nor otherwise obstruct implementation of the County's Green Building Standards Code.

❑ **Regulatory Consistency Conclusion**

As supported by the preceding analysis, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and a less-than-significant impact would occur.

4.5.6 Cumulative Impact Analysis

The proposed Project and cumulative development projects including those listed in Table 4.0-1, *Cumulative Development List of Projects Summary*, would be required to comply with all of the same applicable federal, State, and local regulatory measures aimed at reducing fossil fuel consumption and the conservation of energy. Accordingly, the Project would not cause or contribute to a significant cumulatively considerable impact related to conflicts with a State or local plan for renewable energy or energy efficiency.

4.5.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems.

Threshold b: Less-than-Significant Impact. The Project would not cause or result in the need for additional energy production or transmission facilities. The Project would not conflict with or obstruct the achievement of energy conservation goals within the State of California identified in State and local plans for renewable energy and energy efficiency.

4.5.8 Mitigation

Impact would be less than significant; therefore, mitigation is not required.

4.6 GEOLOGY AND SOILS

The analysis in this Subsection is based, in part, on two (2) site-specific reports prepared by Norcal Engineering. The referenced Norcal Engineering reports include: 1) "Geotechnical Investigation Proposed Warehouse Development Southwest Corner of Slover Avenue and Cactus Avenue," dated September 6, 2017, which is included as *Technical Appendix F1* to this EIR (Norcal Engineering, 2017a), and 2) "Soil Infiltration Study – Proposed Warehouse Development – Located at the Southwest Corner of Slover Avenue and Cactus Avenue, Bloomington," dated September 7, 2017, which is included as *Technical Appendix F2* to this EIR. Additional sources of information used to support the analysis in this Subsection include the Cultural and Paleontological Resources and Geology and Soils sections (Section E and Section F, respectively) of the certified Final Program EIR for the County of San Bernardino General Plan (SCH No. 2005101038), dated February 2007 (County of San Bernardino, 2007), the County of San Bernardino Municipal Code (County of San Bernardino, 2019), and field observations collected by T&B Planning in February 2019 (T&B Planning, 2019). Refer to Section 7.0, *References*, for a complete list of reference sources.

4.6.1 EXISTING CONDITIONS

A. *Soil*

Two (2) types of soil conditions were encountered on the Project site during the geotechnical investigation performed by Norcal Engineering: fill soils and native soils. The characteristics of the soil conditions encountered on the Project site are summarized below.

1. Fill Soils

Fill soils were encountered during the geological field investigation at the ground surface and extending to depths ranging from 12 to 18 inches. The fill soils are classified as silty sand with some gravel, small cobbles, roots and occasional minor debris. The fill soils are noted to be loose and dry to damp. (Norcal Engineering, 2017a, p. 4)

2. Native Soils

Native soils was encountered during the geological field investigation beneath the upper fill soils. The native soils are classified as silty sand with some gravel, and occasional cobbles, which varied with depth of explorations. These soils are noted to be generally medium dense and dry to damp. (Norcal Engineering, 2017a, p. 4)

B. *Water*

Norcal Engineering did not observe any surface water on the Project site. Additionally, groundwater was not encountered at any subsurface testing location on the Project site. Based on data from monitoring wells located approximately 0.75-mile northwest and 1.25 miles southeast of the Project site, respectively, groundwater is expected in the Project area at depths ranging between 100 to 200 feet below the ground surface of the vicinity. (Norcal Engineering, 2017a, p. 4)

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. The geologic structure of southern California is dominated mainly by northwest-trending faults associated with the San Andreas system. The San Jacinto Fault (located approximately 3.4 miles to the east) is the nearest active fault to the Project site (Norcal Engineering, 2017a, p. 3). An active fault is defined by the California Geological Survey (CGS) 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, the potential for fault rupture on the Project site is low. (Norcal Engineering, 2017a, p. 2)

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 (Southern California Earthquake Center, 1999, pp. 5-6). According to the seismic hazards map provided by the CGS and the County of San Bernardino General Plan, the Project site is not located within a designated liquefaction hazard zone or the Geologic Hazard (GH) Overlay, respectively. In addition, the subsurface soil conditions encountered at the Project site – and the lack of shallow groundwater at the site – are not considered conducive to liquefaction; therefore, the potential for liquefaction at the site is very low. (Norcal Engineering, 2017a, p. 6; County of San Bernardino, 2007)

3. Unstable Soils and Slopes

The Project site is generally flat and does not contain, nor is it adjacent to any, steep natural or manufactured slopes and there is no evidence of historical landslides or rockfalls on the site (Google Earth Pro, 2019; T&B Planning, 2019). As such, the site is not susceptible to seismically-induced landslides and rockfalls.

D. Slope and Soil 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 soil data compiled by the United States Department of Agriculture (USDA), soils on the Project site and in the surrounding area primarily contain a low susceptibility to water erosion (USDA, 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 soil data compiled by the USDA, soils on the Project site and in the surrounding area primarily contain a low susceptibility to wind erosion (USDA, n.d.). Under existing conditions, the Project site has the potential to contribute windblown soil and sand because the Project site is primarily vacant with no or little vegetative cover and contains loose and dry topsoil conditions.

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 Norcal Engineering, the settlement potential of soils on the Project site is normal/typical of properties in southern California – ¾ inch and differential settlements of less than ¼ inch (Norcal Engineering, 2017a, p. 11).

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 Norcal Engineering on soils collected from the Project site indicates that the shrinkage potential on the Project site is approximately 12 to 15 percent, and ground subsidence is expected to be minor (Norcal Engineering, 2017a, p. 9).

4. Soil Expansion Potential

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. Soil testing conducted by Norcal Engineering identified the near surface soils on the Project site as having "very low" potential for soil expansion (Norcal Engineering, 2017a, p. 13).

5. Landslide Potential

The Project site and immediately surrounding properties are generally flat and contain no steep natural or manufactured slopes (Google Earth Pro, 2019; T&B Planning, 2019); thus, there is no potential for landslides to occur on or immediately adjacent to the site.

E. Paleontological Resources

1. Project Site Conditions

The Project site was used historically for groves/orchards. Under existing conditions, the Project site is mainly vacant with four (4) single-family residences and the undeveloped portions of the site are routinely maintained (i.e., disced) for weed abatement and vegetation removal. No paleontological resources are known to exist or have been previously discovered on the Project site. The Project site is underlain by Quaternary (Pleistocene to Holocene) alluvium deposits (DOC, 2010).

4.6.2 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations governing issues related to geology and soils.

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 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, 2018d)

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. (DOC, 2018a)

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. (DOC, 2018a)

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). (DOC, 2018a)

Under existing conditions, there are no active faults on the Project site and the Project site is not located within any Alquist-Priolo Earthquake Fault Zone (Norcal Engineering, 2017a, p. 2).

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. (DOC, 2018b)

Staff geologists in the Seismic Hazard Zonation 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. (DOC, 2018b)

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. (DOC, 2018b)

Under existing conditions, the Project site is located in an area with a very low potential for liquefaction and earthquake-induced landslides (Norcal Engineering, 2017a, p. 6).

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. (DOC, 2018c)

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. (DOC, 2018c)

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. (DOC, 2018c)

4. *Building Earthquake Safety Act*

In 1986, the California Legislature determined that buildings providing essential services should be capable of providing those services to the public after a disaster. Their intent in this regard was defined in legislation known as the Essential Services Buildings Seismic Safety Act of 1986 and includes requirements that such buildings shall be "…designed and constructed to minimize fire hazards and to resist…the forces generated by earthquakes, gravity, and winds." This enabling legislation can be found in the California Health and Safety Code, Chapter 2, § 16000 through 16022. In addition, the California Building Code defines how the intent of the act is to be implemented in Title 24, Part 1 of the California Building Standards Administrative Code, Chapter 4, Articles 1 through 3. (CAB, 2019)

5. *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). (CBSC, 2016, p. 3)

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). (CBSC, 2016, pp. 53, 56)

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

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of 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 Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (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 implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify 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. (SWRCB, 2014) The Project site and vicinity are located in the Santa Ana River Watershed, which is within the purview of the Santa Ana RWQCB. The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region.

C. Local Plans, Policies, and Regulations

1. County of San Bernardino General Plan

The County of San Bernardino General Plan includes a Geologic Hazard (GH) Overlay Map, which identifies designated earthquake fault zones, generalized landslide susceptibility, and rockfall/debris flow hazard areas within the County (County of San Bernardino, 2007, p. I-6). The Project site is not located within the GH Overlay (County of San Bernardino, 2007).

2. County of San Bernardino Building Code

The County of San Bernardino Building Code is based on the CBSC and is supplemented with local amendments. The Building Code regulates the construction, alteration, repair, moving, demolition, conversion, occupancy, use, and maintenance of all buildings and structures in the County of San Bernardino. The Building Code is included in Title 6, Division 3, Chapter 1 of the County of San Bernardino Municipal Code. (County of San Bernardino, 2019)

3. County of San Bernardino Municipal Code

The County of San Bernardino Municipal Code (§ 87.08.020) requires development projects to be evaluated by a preliminary soils report that identify site-specific geologic and seismic conditions and provide site-specific recommendations to preclude adverse impacts from soils related hazards and problems. These reports shall recommend corrective action to preclude any structural damage/hazards that may be caused by geological hazards or unstable soils. (County of San Bernardino, 2019)

The County of San Bernardino Municipal Code (§ 85.11.030) also requires development projects to incorporate an erosion control plan into proposed clearing/grubbing, stockpile, grading, or demolition activities to minimize water- and windborne erosion. The erosion control plan is required to be approved by County of San Bernardino staff prior to the issuance of the applicable construction permit. (County of San Bernardino, 2019)

Lastly, the County of San Bernardino Municipal Code (§ 35.0118) requires all projects subject to the MS4 permit to prepare and submit a Water Quality Management Plan (WQMP), which shall include proposed structural BMPs and source and treatment control BMPs to infiltrate and/or adequately treat the projected stormwater and urban runoff for the development project. (County of San Bernardino, 2019)

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)

4.6.3 BASIS FOR DETERMINING SIGNIFICANCE

The proposed Project would result in a significant impact related to geology and soils if the Project or any Project-related component would:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. 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;
ii. Strong seismic ground shaking;
iii. Seismic-related ground failure, including liquefaction; or
iv. Landslides

b. Result in substantial soil erosion or the loss of topsoil;

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;

d. 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;

e. 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 wastewater; or

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to geology and soils that could result from development projects.

4.6.4 IMPACT ANALYSIS

Threshold a:	***Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving***
	i. 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?
	ii. Strong seismic ground shaking?
	iii. Seismic-related ground failure, including liquefaction?
	iv. Landslides?

A. Rupture of Known Earthquake 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 (Norcal Engineering, 2017a, p. 2). 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.

B. Strong Seismic Ground Shaking

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 substantially different than the risk to properties throughout the southern California area. The County of San Bernardino will apply a mandatory condition of approval on the Project that will require the proposed warehouse building to be constructed in accordance with the California Building Standards Code (CBSC), also known as California Code of Regulations (CCR), Title 24 (Part 2), and the County of San Bernardino Building Code. The CBSC and County of San Bernardino Building Code 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, and have been specifically tailored for California earthquake conditions. In addition, the CBSC (Chapter 18) and the County of San Bernardino Municipal Code (§ 87.08.020) require development projects to be analyzed in preliminary soils reports to identify site-specific geologic and seismic conditions and provide site-specific recommendations to preclude adverse effects involving unstable soils and strong seismic ground-shaking, including, but not limited to, recommendations related to ground stabilization, selection of appropriate foundation type and depths, and selection of appropriate structural systems. The Project Applicant retained a professional geotechnical firm, Norcal Engineering, to prepare a geologic engineering report for the Project site, which is included as *Technical Appendix F1* to this EIR. This geologic engineering report complies with the requirements of Chapter 18 of the CBSC and § 87.08.020 of the San Bernardino Municipal Code. In conformance with the Municipal Code, the County will condition the Project Applicant to comply with the site-specific ground preparation and construction recommendations contained in *Technical Appendix F1*.

With mandatory compliance with these standard and site-specific design and construction measures, implementation of the Project would not directly or indirectly expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking. Impacts would be less than significant.

C. *Seismic-Related Ground Failure*

According to available mapping data, the Project site is not expected to be subjected to a significant risk associated with seismic-related ground failure, including liquefaction (Norcal Engineering, 2017a, p. 6). Regardless, as noted above, San Bernardino County will require the Project to be designed and constructed in accordance with applicable seismic safety guidelines, including the standard requirements of the CBSC and County of San Bernardino Building Code. Furthermore, and pursuant to Municipal Code § 87.08.020, Project construction activities would be required to follow the grading and construction recommendations contained within the preliminary soils report for the Project site (see *Technical Appendix F1*), which the County would impose as a condition of approval, to further reduce the risk of seismic-related ground failure due to liquefaction. As such, the implementation of the Project would not directly or indirectly expose people or structures to substantial hazards associated with seismic-related ground failure and/or liquefaction hazards. Impacts would be less than significant.

D. *Landslides*

The Project site is relatively flat, as is the surrounding area. There are no hillsides or steep slopes on the Project site or in the immediate vicinity of the site (Google Earth Pro, 2019; T&B Planning, 2019). No manufactured slopes would be created on-site, except within the proposed infiltration/detention basin where proposed slopes would reach a maximum gradient of 3:1. Also, a retaining wall would be installed along the northern boundary of the Project site and would range from six (6) to nine (9) feet in height. The proposed manufactured slopes and retaining wall would be constructed in accordance with the site-specific recommendations contained within the preliminary soils report for the Project site (as required by the County of San Bernardino Municipal Code § 87.08.020). Mandatory compliance with the recommendations contained within the Project site's preliminary soils report would ensure that proposed manufactured slopes and retaining walls are engineered and constructed to maximize stability and preclude safety hazards to on- and off-site areas. Accordingly, the Project would not be exposed to substantial landslide risks, and implementation of the Project would not pose a substantial direct or indirect landslide risk to surrounding properties. Impacts would be less than significant.

Threshold b: Would the Project result in substantial soil erosion of the loss of topsoil?

A. *Impact Analysis for Temporary Construction-Related Activities*

Under existing conditions, the Project site is mostly vacant with the exception of four (4) single-family residences and associated outbuildings. Development of the Project would result in the demolition of all structures on-site, and grading and construction activities would occur that would further disturb soils on the property. Disturbed soils would be subject to potential erosion during

rainfall events or high winds due to the removal of stabilizing vegetation and building materials (e.g., existing concrete foundations) and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project will be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including grading. The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, that disturb at least one (1) acre of total land area. The County's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires development projects to prepare and submit to the County for approval a site-specific Storm Water Pollution Prevention Plan (SWPPP) to demonstrate compliance with the NPDES permit requirements. The SWPPP is required to identify a combination of erosion control and sediment control measures (i.e., Best Management Practices) that will reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges during construction. In addition, the Project Applicant will be required to comply with SCAQMD Rule 403's requirements related to fugitive dust control, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. Lastly, the Project Applicant would be required to implement an erosion control plan pursuant to San Bernardino Municipal Code § 85.11.030. With mandatory compliance with all applicable regulatory requirements, the potential for water and/or wind erosion on the Project site during construction activities would be less than significant and mitigation is not required.

B. Impact Analysis for Long-Term Operational Activities

Upon Project build-out, the Project site would be covered by a large warehouse building and landscaping and impervious surfaces. Stormwater runoff from the Project site would be captured, treated to reduce waterborne pollutants (including sediment), and conveyed off-site via an on-site storm drain system. Accordingly, the amount of erosion that occurs on the Project site would be minimized upon build out of the Project and would be reduced relative to existing conditions.

The County's MS4 NPDES Permit requires development projects to prepare a Water Quality Management Plan (WQMP) and submit the WQMP to the County for approval (County of San Bernardino, 2019). The WQMP is required to identify an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges. The WQMP also is required to establish a post-construction implementation and maintenance plan to ensure on-going, long-term erosion protection. Compliance with the WQMP will be required as a condition of approval for the Project, as would the long-term maintenance of erosion and sediment control features. The preliminary WQMP for the Project is provided as *Technical Appendix I2* to this EIR. Because the Project's operation would be required to use erosion and sediment control measures to preclude substantial, long-term soil erosion and loss of topsoil, implementation of the Project would result in less-than-significant impacts related to soil erosion.

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 no substantial natural or man-made slopes are located on or adjacent to the Project site (Google Earth Pro, 2019; T&B Planning, 2019). As mentioned in Threshold "a," the Project includes manufactured slopes and a retaining wall; however, both of these features would be engineered for long-term stability and would be constructed in accordance with the recommendations contained within the preliminary soils report prepared for the Project site (as required by the County of San Bernardino Municipal Code § 87.08.020). Accordingly, Project development would result in less-than-significant impacts associated with landslide hazards.

Norcal Engineering determined that individual soil layers at the Project site are subject to an estimated shrinkage ranging from 12 to 15 percent (Norcal Engineering, 2017a, p. 9). However, the geotechnical report prepared for the Project site (*Technical Appendix F1*) indicates that the site's shrinkage/subsidence and settlement potential can be attenuated through the removal of surface and near surface soils down to competent materials and replacement with properly compacted fill (Norcal Engineering, 2017a, pp. 17-18). The County will condition the Project Applicant to comply with the site-specific ground preparation and construction recommendations contained in the Project's geotechnical report (refer to *Technical Appendix F1*). Furthermore, according to the soil infiltration study conducted by Norcal Engineering (*Technical Appendix F2*), the site would be suitable for stormwater infiltration without increasing the potential of settlement from the proposed Project. The potential for hydro-consolidation and susceptibility for ground settlements are considered low. (Norcal Engineering, 2017b, p. 5) Based on the foregoing, potential impacts related to soil shrinkage/subsidence and collapse would be less than significant.

Lateral spreading is primarily associated with liquefaction hazards. As noted above under the discussion of Threshold "a," the potential for liquefaction at the Project site is considered low based on the Project site's topography and soil conditions. Accordingly, impacts associated with lateral spreading would not occur.

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?***

Based on expansion index testing of soil samples, Norcal Engineering determined that the near surface soils on the Project site have a very low expansion potential (Norcal Engineering, 2017a, p. 13). Accordingly, the Project site does not contain expansive soil and as such, implementation of the Project would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. No impact would occur.

[Note: Threshold "d" is based on Appendix G of the CEQA Guidelines and references Table 18-1-B of the 1994 Uniform Building Code (UBC) which has been superseded by the 2013 CBSC. The 2013 CBSC references ASTM D-4829, a standard procedure for testing and evaluating the expansion index (or expansion potential) of soils

established by ASTM International, which was formerly known as the American Society for Testing and Materials (ASTM). ASTM D-4829 was used as the standard for evaluating the Project's potential impact related to expansive soils in the above analysis.]

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 wastewater?***

The Project includes connections to an existing municipal wastewater system. The Project does not include septic tanks or alternative wastewater disposal systems. Accordingly, implementation of the Project would result in no impact related to the use of or performance of septic tanks and/or alternative wastewater systems.

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

The Project site does not contain any known unique geologic features and is underlain with young alluvial fan deposits under existing conditions (DOC, 2010). Although young alluvial fan deposits are generally considered too young to contain substantial fossil deposits, important fossils have been discovered in a variety of alluvial deposits in southern California and older (more sensitive) alluvial deposits may be present on the Project site at depth. Accordingly, the Project has the potential to result in significant adverse impacts to paleontological resources that may exist beneath the ground surface on the Project site and mitigation would be required.

4.6.5 Cumulative Impact Analysis

As noted in the foregoing analysis, all potential Project-related direct and indirect impacts related to geology and soils would be precluded through mandatory conformance with the California Building Standards Code, County of San Bernardino Municipal Code, other standard regulatory requirements, and the site-specific geotechnical recommendations contained within *Technical Appendix F1*, which will be incorporated as part of the Project's design – as required by a condition of approval.

With the exception of erosion hazards, potential hazardous effects related to geologic and soil conditions addressed under Thresholds "a", "c", "d" and "e" are unique to the Project site, and inherently restricted to the specific property proposed for development. That is, issues including fault rupture, seismic ground shaking, 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 by or additive with the geologic and/or soils hazards that may occur on other, off-site properties. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no direct or indirect connection to similar potential issues or cumulative effects to or from other properties.

As discussed under Threshold "b," regulatory requirements, such as County of San Bernardino Municipal Code Sections 35.0113 (NPDES permit), 35.0118 (WQMP), and 85.11.030 (Erosion

Control Plan and SWPPP), and SCAQMD Rule 403 (Fugitive Dust), mandate that the Project incorporate measures during construction and long-term operation to ensure that significant erosion impacts do not occur. Other development projects in the vicinity of the Project site would be required to comply with the same regulatory requirements as the Project to preclude substantial adverse water and wind erosion impacts. Because the Project and other projects within the cumulative study area would be subject to similar mandatory regulatory requirements to control erosion hazards during construction and long-term operation, cumulative impacts associated with wind and water erosion hazards would be less than significant.

Although development activities on the Project site would not impact any known paleontological, there is the remote potential that such resources are buried beneath the surface of the Project site and could be impacted during construction. Other projects within region would similarly have the potential to impact unknown, subsurface paleontological resources during ground-disturbing activities. Therefore, the potential for development on the Project site to impact subsurface paleontological is a cumulatively considerable impact under Threshold "f."

4.6.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. Implementation of the Project would not expose people or structures to substantial direct or indirect adverse effects related to liquefaction or fault rupture. The Project site is subject to seismic ground shaking associated with earthquakes; however, mandatory compliance with local and State regulatory requirements and building codes including, but not limited to, the CBSC (Chapter 18) and County of San Bernardino Municipal Code § 87.08.020, would ensure that the Project minimizes potential hazards related to seismic ground shaking to less-than-significant levels.

Threshold b: Less-than-Significant Impact. Implementation of the Project would not result in substantial soil erosion or loss of topsoil. The Project Applicant would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities and adhere to a Storm Water Pollution Prevention Plan (SWPPP), SCAQMD Rule 403, and San Bernardino Municipal Code § 85.11.030 to minimize water and wind erosion. Following completion of development, the Project's owner or operator would be required by law to implement a WQMP during operation, which would preclude substantial erosion impacts in the long-term.

Threshold c: Less-than-Significant Impact. There is no potential for the Project's construction or operation to cause on- or off-site landslides or lateral spreading. Potential hazards associated with unstable soils would be precluded through mandatory adherence to the recommendations contained in the site-specific geotechnical report during Project construction.

Threshold d: No Impact. The Project site contains soils with very low susceptibility to expansion; therefore, the Project would not create substantial direct or indirect risks to life or property associated with the presence of expansive soils. No impact would occur.

Threshold e: No Impact. No septic tanks or alternative wastewater disposal systems are proposed to be installed on the Project site. Accordingly, no impact would occur associated with soil compatibility for wastewater disposal systems.

Threshold f: Significant Direct and Cumulatively Considerable Impact. The Project would not impact any known paleontological resource or unique geological feature. However, the Project site contains alluvium soils that may contain important paleontological resources. Accordingly, construction activities on the Project site have the potential to unearth and adversely impact paleontological resource that may be buried beneath the ground surface.

4.6.7 MITIGATION

The following mitigation measures would reduce the potential for Project construction to impact buried paleontological resources, should they be discovered during future Project-related ground-disturbing construction activities.

MM 4.6-1 Prior to the issuance of a grading permit, the Project Applicant or construction contractor shall provide evidence to the County of San Bernardino that the construction site supervisors and crew members involved with grading and trenching operations are trained to recognize paleontological resources (fossils) should such resources be unearthed during ground-disturbing construction activities. If a suspected paleontological resource is identified, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations in a 100-foot radius around the find and seek identification and evaluation of the suspected resource by a qualified paleontologist meeting the definition of a qualified vertebrate paleontologist. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note. The significance of the discovered resources shall be determined by the qualified paleontologist. If the resource is determined to be significant, Mitigation Measure 4.6-2 shall apply.

MM 4.6-2 If a significant paleontological resource is discovered on the property, discovered fossils or samples of such fossils shall be collected and identified by a qualified vertebrate paleontologist. Significant specimens recovered shall be properly recorded, treated, and donated to the San Bernardino County Museum, Division of Geological Sciences, or other repository with permanent retrievable paleontologic storage. A final report shall be prepared and submitted to the County of San Bernardino that itemizes any fossils recovered, with maps to accurately record the original location of recovered resources, and contains evidence that the resources were donated to and accepted for curation by the San Bernardino County Museum or other repository.

4.6.8 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold f: Less-than-Significant Impact. Mitigation Measures MM 4.6-1 and MM 4.6-2 would ensure the proper identification and subsequent treatment of any paleontological resources that may be encountered during ground-disturbing activities associated with implementation of the proposed Project. Therefore, with implementation of Mitigation Measures MM 4.6-1 and MM 4.6-2, the Project's potential impact to paleontological resources would be reduced to less-than-significant.

4.7 GREENHOUSE GAS EMISSIONS

The analysis in this Subsection is based on a report prepared by Urban Crossroads, Inc. titled, "Slover and Cactus Warehouse Greenhouse Gas Analysis," dated April 26, 2019, that is included as *Technical Appendix G* to this EIR (Urban Crossroads, 2019e). The analysis provided in this Subsection evaluates the Project's potential to generate greenhouse gas (GHG) emissions that could contribute substantially to Global Climate Change (GCC) and its associated environmental effects. Refer to Section 7.0, *References*, for a complete list of references.

4.7.1 EXISTING CONDITIONS

A. Introduction to Global Climate Change

GCC is defined as the change in average meteorological conditions on Earth with respect to temperature, precipitation, and storms. GCC is a controversial environmental issue in the United States and there is much debate within the scientific community about the degree to which GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred over the course of thousands or millions of years, and that these historical changes to Earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift taking place since the industrial revolution (1900) 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 planet Earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. (Urban Crossroads, 2019e, p. 8)

An individual land development project is not capable of generating the magnitude of GHG emissions necessary to cause a discernible effect on global climate. However, individual development projects may contribute to GCC by generating GHGs that combine with other regional and global sources of GHGs. (Urban Crossroads, 2019e, p. 8)

B. Greenhouse Gases

Carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) emissions are the focus of evaluation in this Subsection because these gases are the primary contributors to GCC resulting from land development projects. Although other substances, such as fluorinated gases, also contribute to GCC, sources of fluorinated gases are not well-defined and no accepted emissions factors or methodology exist to accurately calculate the emissions of these gases. (Urban Crossroads, 2019e, p. 8)

Individual GHGs have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. CO_2 is used as the base reference unit for GWP and, therefore, has a GWP of 1. As shown in the Table 4.7-1, *GWP and Atmospheric Lifetime of Select GHGs*, GWP ranges from 1 for CO_2 to 22,800 for Sulfur Hexafluoride (SF_6). The atmospheric lifetime and GWP of common GHGs are summarized in Table 4.7-1. (Urban Crossroads, 2019e, pp. 11-12)

Table 4.7-1 GWP and Atmospheric Lifetime of Select GHGs

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		Second Assessment Report (SAR)	5th Assessment Report (AR5)
Carbon Dioxide	See Footnote 1	1	1
Methane	12.4	21	28
Nitrous Oxide	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
Sulfur Hexafluoride (SF_6)	3,200	23,900	23,500

[1]No single lifetime can be given.
Source: (Urban Crossroads, 2019e)

Provided below is a description of the various gases that contribute to GCC. For more information about these gases and their associated human health effects, refer to Section 2.4 of *Technical Appendix G* and the reference sources cited therein.

- **Water Vapor (H_2O)** is the most abundant and variable GHG in the atmosphere. Changes in the concentration of water vapor in the atmosphere are considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. 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 rises (in essence, the air is able to 'hold" more water when it is warmer), leading to more water vapor in the atmosphere. The higher concentration of water vapor in the atmosphere is then able to absorb more indirect thermal energy radiated from the Earth, further warming the atmosphere and causing the evaporation cycle to perpetuate. 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 also condense into clouds, which are able to reflect incoming solar radiation and thereby allow less energy to reach the Earth's surface and heat it up. There are no human health effects from water vapor itself; however, certain pollutants can dissolve in water vapor and the water vapor can then act as a pollutant-carrying agent. (Urban Crossroads, 2019e, p. 9)
- **Carbon Dioxide (CO_2)** is an odorless and colorless GHG that is emitted from natural and man-made sources. Natural CO_2 sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Man-made CO_2 sources include: the burning of coal, oil, natural gas, and wood.

Since the industrial revolution began in the mid-1700s, human activities that produce CO_2 have increased dramatically. As an example, prior to the industrial revolution, CO_2 concentrations in the atmosphere were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Exposure to CO_2 in high concentrations can cause adverse human health effects, but outdoor (atmospheric) levels are not high enough to be detrimental to human health. (Urban Crossroads, 2019e, pp. 9-10)

- **Methane (CH_4)** absorbs thermal radiation extremely effectively (i.e., retains heat). Over the last 50 years, human activities such as rice cultivation, cattle ranching, natural gas combustion, and coal mining have increased the concentration of methane in the atmosphere. Other man-made sources include fossil-fuel combustion and biomass burning. No human health effects are known to occur from atmospheric exposure to methane; however, methane is an asphyxiant that may displace oxygen in enclosed spaces. (Urban Crossroads, 2019e, p. 10)

- **Nitrous Oxide (N_2O)** concentrations began to rise in the atmosphere at the beginning of the industrial revolution. N_2O can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction. N_2O is produced by microbial processes in soil and water, including reactions that occur in nitrogen-containing fertilizer. 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. N_2O also is used as an aerosol spray propellant, as a preservative in potato chip bags, and in rocket engines and in race cars. Also, known as laughing gas, N_2O is a colorless GHG that can cause dizziness, euphoria, and hallucinations. In small doses, it is considered harmless; however, heavy and extended use can cause brain damage. (Urban Crossroads, 2019e, p. 10)

- **Chlorofluorocarbons (CFCs)** are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are non-toxic, non-flammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 and have no natural source. CFCs were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and has been extremely successful, so much so that levels of CFCs are now remaining steady or declining. However, due to their long atmospheric lifetime, some of the CFCs will remain in the atmosphere for over 100 years. (Urban Crossroads, 2019e, p. 10)

- **Hydrofluorocarbons (HFCs)** are synthetic, man-made chemicals that are used as a substitute for CFCs and have one of the highest global warming potential ratings. The HFCs with the largest measured atmospheric abundances are (in order largest to smallest), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). No human health effects are known to result from exposure to HFCs, which are man-made and used for applications such as automobile air conditioners and refrigerants. (Urban Crossroads, 2019e, p. 11)

- **Perfluorocarbons (PFCs)** are primarily produced for aluminum production and semiconductor manufacture. PFCs have stable molecular structures and do not break down

through chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). No human health effects are known to result from exposure to PFCs. (Urban Crossroads, 2019e, p. 11)

- **Sulfur Hexafluoride (SF_6)** is an inorganic, odorless, colorless, nontoxic, nonflammable gas. Sulfur hexafluoride 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. (Urban Crossroads, 2019e, p. 11)

C. *Greenhouse Gas Emissions Inventory*

1. Global and National

Worldwide, man-made GHG emissions are tracked by the Intergovernmental Panel on Climate Change. Man-made GHG emissions data is available through 2016. For the year 2016, total GHG emissions were approximately 28,747,554 gigagrams (Gg) of carbon dioxide equivalent (CO_2e), and the United States was the world's second-largest emitter of GHGs. (Urban Crossroads, 2019e, p. 12)

The primary man-made GHG emitted in the United States was CO_2, representing approximately 82 percent of the United States' total GHG emissions. Fossil fuel emissions are the largest source of CO_2 in the United States, accounting for approximately 94 percent of the United States' total CO_2 emissions. (Urban Crossroads, 2019e, p. 12)

2. State of California

The California Air Resources Board (CARB) compiles GHG inventories for the State of California. Based on the most recent GHG inventory data compiled in 2018, California emitted approximately 429.4 million metric tons (MMT) CO_2e. California is the second-largest emitter of GHGs in the United States. (Urban Crossroads, 2019e, pp. 12-13)

3. Project Site

Under existing conditions, large portions of the Project site are vacant and undeveloped with the exception of four (4) single-family residences: two (2) on the western portion, one at the southeastern corner and one at the northeastern portion of the Project site. The undeveloped portions of the Project site consist of former (fallow) agricultural land that is routinely maintained (i.e., disced) for weed abatement. Sources of GHG emissions on-site under existing conditions include residential activity from the four (4) residences on the site (e.g., energy use, vehicular transportation to-and-from the site) and the operation of maintenance equipment associated with periodic weed abatement activities. Although the Project site produces GHG emissions under existing conditions, for purposes of analysis (and in order to present a "worst-case" scenario) the Project's GHG analysis assumes all GHG emissions that would be generated by the Project are "new" emissions and no deduction is taken for the elimination of any existing GHG emissions on the Project site.

D. Potential Effects of Climate Change in California

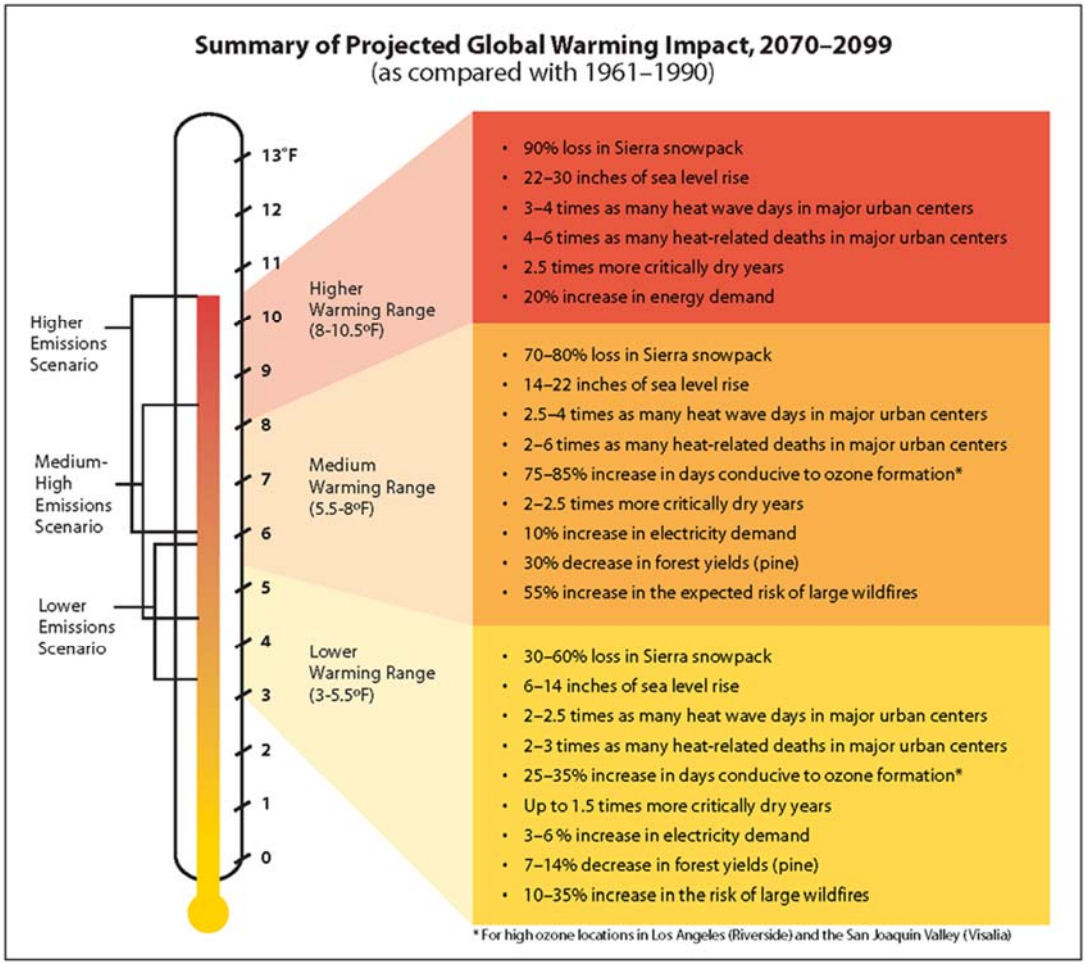
In February 2006, the California Climate Change Center (CCCC) published a report titled "Scenarios of Climate Change in California: An Overview" (the "Climate Scenarios report") that is generally instructive about effects of climate change in California. The Climate Scenarios report used a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century: lower warming range (3.0-5.4°F); medium warming range (5.5-7.8°F); and higher warming range (8.0-10.4°F). (CCCC, 2006, p. 7) In addition, the California Natural Resources Agency adopted a "California Climate Adaptation Strategy" in 2009. This report details many vulnerabilities arising from climate change with respect to matters such as temperature extremes, sea level rise, wildfires, floods and droughts and precipitation changes, and responds to the Governor's Executive Order (EO) S-13-2008 that called on state agencies to develop California's strategy to identify and prepare for expected climate impacts. (California Natural Resources Agency, 2009, p. 4)

Based on the estimated scenarios presented in the Climate Scenario and California Climate Adaption Strategy reports, Table 4.7-2, *Summary of Projected Global Warming Impact, 2070-2099*, presents potential impacts of global warming within California.

The potential effects of climate change in California are summarized in more detail below and include, but are not limited to, the following:

- **Human Health Effects.** Climate change can affect the health of Californians by increasing the frequency, duration, and intensity of conditions conducive to air pollution formation, oppressive heat, and wildfires. The primary concern is not the change in average climate, but rather the projected increase in extreme conditions that are responsible for the most serious health consequences. In addition, climate change has the potential to influence asthma symptoms and the incidence of infectious disease. (CCCC, 2006, p. 26)
- **Water Resource/Supply Effects.** Although most climate model simulations predict relatively moderate changes in precipitation over the 21st century, rising temperatures are expected to lead to diminishing snow accumulation in mountainous watersheds, including the Sierra Nevada. Warmer conditions during the last few decades across the western United States have already produced a shift toward more precipitation falling as rain instead of snow, and snowpacks over the region have been melting earlier in the spring. Delays in snow accumulation and earlier snowmelt can have cascading effects on water supplies, natural ecosystems, and winter recreation. (CCCC, 2006, p. 14)
- **Agriculture Effects.** Agriculture, along with forestry, is the sector of the California economy that is most likely to be affected by a change in climate. California agriculture is a $68 billion industry. California is the largest agricultural producer in the nation and accounts for 13% of all U.S. agricultural sales, including half of the nation's total fruits and

Table 4.7-2 Summary of Projected Global Warming Impact, 2070-2099



Source: (Urban Crossroads, 2019e, Exhibit 2-A)

vegetables. Regional analyses of climate trends over agricultural regions of California suggest that climate change is already affecting the agriculture industry. Over the period 1951 to 2000, the growing season has lengthened by about a day per decade, and warming temperatures resulted in an increase of 30 to 70 growing degree days per decade, with much of the increase occurring in the spring. Climate change affects agriculture directly through increasing temperatures and rising CO2 concentrations, and indirectly through changes in water availability and pests. (CCCC, 2006, p. 19)

- **Forest and Landscape Effects.** Climate changes and increased CO2 concentrations are expected to alter the extent and character of forests and other ecosystems. The distribution of species is expected to shift; the risk of climate-related disturbance such as wildfires, disease, and drought is expected to rise; and forest productivity is projected to increase or decrease – depending on species and region. In California, these ecological changes could have measurable implications for both market (e.g., timber industry, fire suppression and damages costs, public health) and nonmarket (e.g., ecosystem services) values. (CCCC, 2006, p. 22)

- **Sea Level Effects.** Coastal observations and global model projections indicate that California's open coast and estuaries will experience rising sea levels during the next century. Sea level rise already has affected much of the coast in southern California, Central California, and the San Francisco Bay and estuary. These historical trends, quantified from a small set of California tide gages, have approached 0.08 inches per year (in/yr), which are rates very similar to those estimated for global mean sea level. So far, there is little evidence that the rate of rise has accelerated, and indeed the rate of rise at California tide gages has actually flattened since about 1980. However, projections indicate that substantial sea level rise, even faster than the historical rates, could occur during the next century. Sea level rise projections range from 5.1–24.4 inches (in.) higher than the 2000 sea level for simulations under the lower emissions scenario, from 7.1–29.9 in. for the medium-high emission scenario, and from 8.5–35.2 in. for the higher emissions scenario. (CCCC, 2006, p. 10)

4.7.2 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to GHG emissions.

A. International Plans, Policies, and 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.)

In Doha, Qatar, on December 8, 2012, 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 will take 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 also 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. In accordance with articles within the Paris Agreement, the earliest effective date for the United States' withdrawal from the Agreement is November 4, 2020.

B. Federal Plans, Policies, and 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.

Previously the EPA had not regulated GHGs under the CAA because it asserted that the Act 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.

C. State Plans, Policies, and 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 latest revisions (2016 Building Energy Efficiency Standards) became effective on January 1, 2017. The 2016 Building Energy Efficiency Standards are 28 percent more efficient than the previous (2013) Building Energy Efficiency Standards for residential construction and 5 percent more efficient than the previous Standards for non-residential construction. (The 2013 Building Energy Efficiency Standards already were 25 percent more efficient for residential construction and 30 percent more

efficient for nonresidential construction than the 2008 Building Energy Efficiency Standards they replaced.) The next Standards update (2019) will become effective on January 1, 2020.

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.

2. 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 rule 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, 2017)

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, 2017)

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 the 2002 legislation Assembly Bill 1493 (Pavley). (CARB, 2017)

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, 2017)

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, 2017)

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 with meeting 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 to report: 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. (CCC, n.d.)

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, 2019a) AB 32 specifically requires that CARB shall do the following:

- 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 the Board 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. (CARB, 2019a)

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). Accordingly, 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) was established as the emissions limit for 2020. For comparison, CARB's estimate for baseline GHG emissions was 473 MMTCO2e for 2000 and without emissions reduction measures 2010 emissions were projected to be 532 $MMTCO_2e$. "Business as usual" conditions (without the reductions to be implemented by CARB regulations) for 2020 were projected to be 596 $MMTCO_2e$. (CARB, 2007)

AB 32 requires CARB to develop a Scoping Plan which lays out California's strategy for meeting the goals. The Scoping Plan must be updated every five years. In December 2008, the Board approved the initial Scoping Plan, which included a suite of measures to sharply cut GHG emissions. Table 4.7-3, *Scoping Plan GHG Reduction Measures Towards 2020 Target*, shows the proposed reductions from regulations and programs outlined in the Scoping Plan. While local government operations were not accounted for in achieving the Year 2020 emissions reduction, local land use changes are estimated to result in a reduction of 5 $MMTCO_2e$, which is approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role local governments will play in successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of 2006 levels by 2020 to ensure that municipal and community-wide emissions match the State's reduction target. According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 $MMTCO_2e$ (or approximately 1.2 percent of the GHG reduction target). (CARB, 2019a)

Overall, CARB determined that achieving the 1990 emission level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent in the absence of new laws and regulations (referred to as "Business-As-Usual" [BAU]). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team (CAT) early actions and additional GHG reduction measures, identifies additional measures to be pursued as regulations, and outlines the role of the cap-and-trade program.

When the 2020 emissions level projection was updated to account for regulatory measures, the 2020 projection in the BAU condition was reduced further to 507 metric tons of carbon dioxide equivalent ($MTCO_2e$). As a result, based on the updated economic and regulatory data, CARB determined that achieving the 1990 emissions level in 2020 would now only require a reduction of GHG emissions of 80 MTCO2e, or approximately 16 percent (down from 28.5 percent), from the BAU condition.

Table 4.7-3 Scoping Plan GHG Reduction Measures Towards 2020 Target

Recommended Reduction Measures	*Reductions Counted toward 2020 Target of 169 MMT CO2e*	*Percentage of Statewide 2020 Target*
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB. 2008, MMTons CO2e: million metric tons of CO2e
[1]Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target.
[2]According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO2e (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 Target

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 $MTCO_2e$ 1990 emissions level and 2020 GHG

emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 $MTCO_2e$. 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 $MTCO_2e$ (down from 509 $MTCO_2e$), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. (CARB, 2019a)

In December 2017, CARB adopted the Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update reflects the 2030 target of a 40 percent GHG emissions reduction below 1990 levels set by SB 32. The Second Update builds upon the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks and freight movement; cleaner, renewable energy; and strategies to reduce methane emissions from agricultural and other wastes to reduce GHG emissions.

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 (EO) 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_2e grams per unit of fuel energy sold. (CCC, n.d.)

7. Senate Bill 1078

Senate Bill (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. (CCC, n.d.)

8. Senate Bill 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. (CCC, n.d.)

9. Executive Order S-14-08

On November 17, 2008, former 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.

10. Senate Bill 97

The CEQA Guideline amendments do not identify a quantitative 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 on available information, 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. The GHG analysis thresholds incorporated into the CEQA Guidelines' Environmental Checklist (Guidelines Appendix G) are addressed in this EIR. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010. (OPR, n.d.)

11. 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 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. 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, 2019b)

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, 2019b)

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, 2019b)

12. Executive Order B-30-15 & Senate Bill 32

On April 29, 2015, former 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). (CCC, n.d.)

On September 8, 2016, former Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 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.

D. Local Plans, Policies, and Regulations

1. San Bernardino County Regional Greenhouse Gas Reduction Plan

The County of San Bernardino adopted a Greenhouse Gas Reduction Plan in September 2011, which provides guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects located within the unincorporated communities of San Bernardino County. The Greenhouse Gas Reduction Plan includes a GHG Development Review Process (DRP) that specifies a two-step approach in quantifying GHG emissions. First, a screening threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year is used to determine if additional analysis is required. If a proposed project were to produce GHG emissions in exceedance of 3,000 MTCO2e per year, then the project is required to either achieve a minimum of 100 points per the Screening Tables provided within the Greenhouse Gas Reduction Plan or achieve a 31% reduction in $MTCO_2e$ emissions over 2007 emissions levels. In accordance with the Greenhouse Gas Reduction Plan, if a development project were to emit less than 3,000 $MTCO_2e$ per year, or reach the 100-point minimum score on the screening table, or reduce emissions by 31% from 2007 emissions, the project would be determined to have a less-than-significant impact for GHG emissions. (Urban Crossroads, 2019e, p. 45; County of San Bernardino, 2011, p. 4-5)

4.7.3 Methodology for Estimating Greenhouse Gas Emissions

The California Emission Estimator Model (CalEEMod), developed by the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the SCAQMD and air pollution control districts across the state, was used to quantify GHG emissions from Project-related construction and operational activities. CalEEMod is the software analysis tool recommended by SCAQMD for the quantification of GHG emissions associated with the construction and operation of land development projects because it is the only software model maintained by CAPCOA and incorporates locally-approved emission factors and methodologies for estimating pollutant emissions. The most recent version of CalEEMod available at the time the NOP for this EIR was published was used in the Project analysis (v2016.3.2, released on October 17, 2017). (Urban Crossroads, 2019e, p. 40) Inputs and outputs from the model runs for both Project-related construction and operational activities are provided in Appendix 3.1 of *Technical Appendix G*.

Although CalEEMod is a comprehensive analysis tool, CalEEMod is limited to quantifying GHG emissions that are known as of the date of release of the model, there may be sources of GHG emissions that are not known (or not quantifiable) at this time but may be measurable by the time the Project is constructed and operational. Furthermore, CalEEMod relies on data published by the CARB and other data sources to be representative of local/regional averages which may not be completely representative of the Project's construction and/or operational characteristics (and may slightly underestimate or overestimate the Project's emissions). Lastly, not all the CalEEMod calculation data files are known or publicly available for review, although it is reasonable to assume that the data contained in CalEEMod is accurate and grounded in science because CalEEMod is developed by CAPCOA in collaboration with 35 local air pollution control districts.

A life-cycle analysis (LCA), which assesses economy-wide GHG emissions from construction (i.e., the processes in manufacturing and transporting all raw materials used in the project development and infrastructure) and operation, was not conducted for the Project due to the lack of scientific consensus on LCA methodology. A LCA depends on emission factors or econometric factors that are not well established for all processes as of the date the NOP for this EIR was published. Additionally, SCAQMD recommends analyzing a project's direct and indirect GHG emissions generated within California in-lieu of a LCA because the life-cycle effects from a project could occur outside of California and these effects might not be well understood or well documented and would be infeasible to mitigate. (Urban Crossroads, 2019e, pp. 40-41)

A. Methodology for Estimating Project-Related Construction Emissions

The Project's construction-related GHG emissions were calculated using the same methodology, construction schedule information, and equipment fleet information that were previously described in detail in EIR Subsection 4.3, *Air Quality*, and also used to calculate construction-related criteria air pollutant emissions, and as (Urban Crossroads, 2019e, p. 41). Refer to EIR Subsection 4.3 for a detailed description of the methodology used to calculate the Project's construction GHG emissions.

In accordance with the SCAQMD recommendations, Project-related construction GHG emissions were quantified, amortized over a 30-year period, and then added to the sum of the Project annual operational GHG emissions (Urban Crossroads, 2019e, p. 41).

B. Methodology for Estimating Project-Related Operational Emissions

The Project's operational GHG emissions were calculated using the same methodology that was used to calculate operational criteria air pollutant emissions, and as previously described in detail in EIR Subsection 4.3, *Air Quality* (Urban Crossroads, 2019e, pp. 41-44). Refer to EIR Subsection 4.3 and *Technical Appendix G* for a detailed description of the methodology used to calculate the Project's operational GHG emissions.

4.7.4 Basis for Determining Significance

The proposed Project would result in a significant impact 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 Appendix G to the CEQA Guidelines and address a development project's potential contribution to GCC. Neither the CEQA Statute nor the CEQA Guidelines prescribe specific methodologies and significance criteria for determining the significance of GHG emissions impacts. The CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate thresholds consistent with the manner in which other impact categories are handled in CEQA. CEQA case law has upheld local agencies' discretion to determine the significance of GHG emissions impacts.

As part of the November, 30, 2015, decision in *Center for Biological Diversity v. California Department of Fish and Wildlife ("Newhall Ranch")*, the California Supreme Court outlined four potential pathways that CEQA compliance documents could use to determine if GHG emissions from a specific project would be significant under Threshold "a":

- Substantiation of Project Reductions from "Business as Usual" (BAU). A lead agency may use a BAU comparison based on the CARB Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project level reductions from new land use development at the proposed location;

- Compliance with Regulatory Programs or Performance-based Standards. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities;
- Compliance with GHG Reduction Plans or Climate Action Plans (CAPs). A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis; or
- Compliance with Local Air District Thresholds. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts.

Based on the foregoing guidance from the California Supreme Court, GHG emissions that do not exceed the screening threshold of 3,000 $MTCO_2e$ from the County's Greenhouse Gas Reduction Plan would clearly have a less-than-significant pursuant to Threshold "a." If Project-related emissions exceed 3,000 $MTCO_2e$, then a significant impact would occur if the Project is unable to achieve the mitigation standards established by the Greenhouse Gas Reduction Plan (i.e., a minimum 100-point score on the Greenhouse Gas Reduction Plan Screening Tables or a 31% reduction in GHG emissions relative to 2007 levels). The County's Greenhouse Gas Reduction Plan is a geographically-specific GHG emissions reduction plan that was adopted by the County for purposes of reducing County-wide GHG emissions in a manner consistent with AB 32 and applicable State legislation. For purposes of evaluation under CEQA, the County of San Bernardino determined that GHG emissions from a private development project found to be consistent with the Greenhouse Gas Reduction Plan would result in a less-than-significant impact to the environment pursuant to Threshold "a."

4.7.5 IMPACT ANALYSIS

Threshold a:	***Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

The Project's annual GHG emissions are summarized in Table 4.7-4, *Project Annual GHG Emissions*. As shown in Table 4.7-4, the Project would generate approximately 2,958.27 $MTCO_2e$ per year. Of the Project's annual GHG emissions, approximately 2,268.92 $MTCO_2e$ (76.7%) would be from mobile sources (passenger cars and trucks) and amortized construction equipment emissions, while approximately 689.35 $MTCO_2e$ (23.3%) would be from all other Project sources combined (construction, area, energy, waste, and water usage). Because total Project-related GHG emissions would not exceed the County's annual screening threshold of 3,000 $MTCO_2e$, the Project would not generate substantial GHG emissions – either directly or indirectly – and impacts to the environment related to GHG emissions would be less than significant.

Table 4.7-4 Project Annual GHG Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N2O	Total CO_2E
Annual construction-related emissions amortized over 30 years	24.06	0.00	0.00	24.18
Area	0.01	4.00E-05	0.00	0.02
Energy	237.08	9.17E-03	2.30E-03	238.00
Mobile Sources (Passenger Cars)	439.09	8.93E-03	0.00	439.31
Mobile Sources (Trucks)	1,803.85	0.06	0.00	1,805.43
Waste	49.20	2.91	0.00	121.90
Water Usage	266.31	1.95	0.05	329.44
Total CO_2E (All Sources)	**2,958.27**			
Screening Threshold (CO_2E)	**3,000**			
Threshold Exceeded?	**NO**			

Source: (Urban Crossroads, 2019e, Table 3-1)

Threshold b: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The County of San Bernardino's Greenhouse Gas Reduction Plan was designed to further GHG reduction efforts at the local level. Because the Project would not conflict with the provisions of the Plan (as summarized under the analysis for Threshold "a"), the Project and its implementing actions would reflect specific local requirements that would substantially lessen GHG emissions.

The Project also would comply with a number of regulations, policies, plans, and policy goals that would further reduce GHG emissions, including Title 24 California Building Standards Code (CBSC), Assembly Bill 32 (AB 32), and Senate Bill 32 (SB 32), which are regulations particularly applicable to the Project.

The Project would provide for the construction and operation of a warehouse building that would include contemporary, energy-efficient/energy-conserving design features and operational procedures. Warehouse land uses are not inherently energy-intensive and the total Project energy demands would be comparable to, or less than, other goods movement projects of similar scale and configuration due to the Project's modern construction and requirement to be constructed in accordance with the most recent CBSC (Urban Crossroads, 2018c, pp. 1, 45-46). The CBSC includes the California Energy Code, or Title 24, Part 6 of the California Code of Regulations, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings. The California Energy Code was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated approximately every three years to improve energy efficiency by allowing incorporating new energy efficiency technologies and methods. The Project would be required to comply with all applicable provisions of the CBSC. As such, the Project's energy demands would be minimized through design features and operational programs that, in

aggregate, would ensure that Project energy efficiencies would comply with – or exceed – incumbent CBSC energy efficiency requirements, thereby minimizing GHG emissions produced during from energy consumption.

As previously discussed in Subsection 4.7.2C, CARB identified measures in its Scoping Plan that would reduce statewide GHG emissions and achieve the emissions reductions goals of AB 32. Thus, projects that are consistent with the CARB Scoping Plan would not conflict with AB 32's mandate to reduce state GHG emissions. Table 4.7-5, *CARB Scoping Plan Consistency*, presents the 39 recommended actions identified by CARB in its Scoping Plan. Of the 39 measures identified, those that would be applicable to the Project consist primarily of actions related to energy efficiency, green buildings, recycling and waste, sustainable forests, and water use. A summary of the Project's consistency with the CARB Scoping Plan recommended actions is presented on the following pages and also summarized in Table 4.7-5.

Table 4.7-5 CARB Scoping Plan Consistency

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	Not Applicable. These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect light industrial (warehousing, manufacturing) projects.
Light-Duty Vehicle Standards	T-1	Not Applicable. This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	Consistent. The Project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	Not Applicable. Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	Not Applicable. Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	Not Applicable. This is a statewide measure and is not within the purview of this Project.
Vehicle Efficiency Measures	T-4	Not Applicable. Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	Not applicable. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are yet to be implemented and will be voluntary, the proposed Project would not interfere with their implementation.
	T-6	
Million Solar Roofs (MSR) Program	E-4	Not applicable. The MSR program sets a goal for use of solar systems throughout the state as a whole.

Table 4.7-5 CARB Scoping Plan Consistency

Action	Supporting Measures	Consistency
Medium- & Heavy-Duty Vehicles	T-7 T-8	Not applicable. MD and HD trucks and trailers working from the proposed warehouses will be subject to aerodynamic and hybridization requirements as established by ARB; no feature of the Project would interfere with implementation of these requirements and programs.
Industrial Emissions	I-1 I-2 I-3 I-4 I-5	Not Applicable. These measures are applicable to large industrial facilities (> 500,000 $MTCO_2E/YR$) and other intensive uses such as refineries.
High Speed Rail	T-9	Not Applicable. Supports increased mobility choice.
Green Building Strategy	GB-1	Consistent. The Project will include a variety of building, water, and solid waste efficiencies consistent with 2016 CALGREEN requirements.
High Global Warming Potential Gases	H-1 H-2 H-3 H-4 H-5 H-6 H-7	Not Applicable. The Project is not a generator of substantial sources of high GWP emissions and will comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
Recycling and Waste	RW-1 RW-2 RW-3	Consistent. The Project will be required recycle a minimum of 50 percent from construction activities and operations per State and County requirements.
Sustainable Forests	F-1	Consistent. The Project will increase carbon sequestration by planting trees on-site per the Project landscaping plan.
Water	W-1 W-2 W-3 W-4 W-5 W-6	Consistent. The Project will include use of low-flow fixtures and efficient landscaping per State requirements.
Agriculture	A-1	Not Applicable. The Project is not an agricultural use.

Source: (Urban Crossroads, 2019e, Table 3-2)

- Energy Efficiency & Green Building Strategy: Actions E-1, E-2, E-3, CR-1, CR-2, and GB-1 target regulatory and building practices to increase energy efficiency. The Project is required by law to comply with the incumbent Title 24 Energy Efficiency standards and would not conflict with these actions. Based on the foregoing, implementation of the Project would not conflict with or preclude implementation of the CARB Scoping Plan energy efficiency or green building strategy actions. (Urban Crossroads, 2019e, pp. 45-48)
- Recycling and Waste: Actions RW-1 through RW-3 involve reducing methane emissions at landfills, increasing waste diversion, and mandating commercial recycling. The Project will be required to recycle a minimum of 50 percent from construction activities and operations

per State and County requirements (i.e., AB 939 and AB 75); therefore, the Project and its implementing actions would not conflict with the CARB Scoping Plan recycling and waste actions. (Urban Crossroads, 2019e, pp. 45-48; CalRecycle, 2018a; CA Legislative Information, 1999)

- Sustainable Forests: Action F-1 targets preserving forest sequestration and encouraging the use of forest biomass for sustainable energy generation. The Project will increase carbon sequestration by increasing on-site trees per the Project landscaping plan on file with the County of San Bernardino. Based on the foregoing, the Project and its implementing actions would not conflict or preclude implementation of the CARB Scoping Plan sustainable forest actions. (Urban Crossroads, 2019e, pp. 45-48)
- Water: Actions W-1 through W-6 are applicable to development proposals like the Project; however, because Project implementation would not exceed the audit threshold for these actions, the Project would be considered consistent with Actions W-1 through W-6. The Project will include use of low-flow fixtures and efficient landscaping per State requirements (CBSC, 2016). Based on the foregoing, operation of the Project would not conflict with or preclude implementation of the CARB Scoping Plan water use actions. (Urban Crossroads, 2019e, pp. 45-48)

As demonstrated by the foregoing analysis, the Project would not conflict with or preclude implementation of the CARB Scoping Plan.

In April 2015, former Governor Edmund Brown Jr. signed EO B-30-15, which advocated for a statewide GHG-reduction target of 40 percent below year 1990 levels by 2030 and 80 percent below 1990 levels by 2050. In September 2016, former Governor Brown signed the Senate Bill (SB) 32. SB 32 formally established a statewide goal to reduce GHG emissions to 40 percent below year 1990 levels by 2030. To date, no statutes or regulations have been adopted to translate the year 2050 GHG reduction goal into comparable, scientifically-based statewide emission reduction targets. (Urban Crossroads, 2019e, p. 39)

According to research conducted by the Lawrence Berkeley National Laboratory and supported by the CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the years 2020 and 2030 reduction targets established by AB 32 and SB 32, respectively (Urban Crossroads, 2019e, pp. 26-27). As described above, the Project would not conflict with or obstruct implementation of the CARB Scoping Plan; therefore, the Project would not interfere with the State's ability to achieve the year 2030 GHG-reduction target established by SB 32.

Rendering a significance determination for year 2050 GHG emissions relative to EO B-30-15 would be speculative because EO B-30-15 establishes a goal more than three decades into the future; no agency with GHG subject matter expertise has adopted regulations to achieve these statewide goals at the project-level; and, available analytical models cannot presently quantify all project-related emissions in those future years. Further, due to the technological shifts anticipated and the unknown parameters of the regulatory framework in 2050, available GHG models and the corresponding

technical analyses are subject to limitations for purposes of quantitatively estimating the Project's emissions in 2050.

As described on the preceding pages, the Project would not conflict with the State's ability to achieve the State-wide GHG reduction mandates and would be consistent with applicable policies and plans related to GHG emissions reductions. Implementation of the Project would not actively interfere with any future federally- State, or locally-mandated retrofit obligations enacted or promulgated to legally require development projects to assist in meeting State-adopted GHG emissions reduction targets, including those established under Executive Order S-3-05, Executive Order B-30-15, or SB 32. Therefore, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would result in a less-than-significant impact.

4.7.6 Cumulative Impact Analysis

GCC occurs as the result of global emissions of GHGs. An individual development project does not have the potential to result in direct and significant GCC-related effects in the absence of cumulative sources of GHGs. The CEQA Guidelines also emphasize that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis (See CEQA Guidelines § 15130[f]). Accordingly, the analysis provided in Subsection 4.7.5 reflects an impact analysis of the cumulative effects related to the Project's GHG emissions. As concluded in Subsection 4.7.5, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Accordingly, the Project would not result in a cumulatively-considerable impact related to GHG emissions.

4.7.7 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project is calculated to generate approximately 2,958.27 $MTCO_2e$ annually, which would not exceed the County's screening threshold of 3,000 $MTCO_2e$. As such, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment.

Threshold b: Less-than-Significant Impact. The Project would be consistent with applicable regulations, policies, plans, and policy goals that would further reduce GHG emissions.

4.7.8 Mitigation

Impact would be less than significant; therefore, mitigation is not required.

4.8 HAZARDS AND HAZARDOUS MATERIALS

The information and analysis presented in this Subsection is based, in part, on a technical study that was prepared for the Project site by SCS Engineers (hereafter, "SCS"), titled "Phase I Environmental Site Assessment, 13.24-Acre Site Located at Slover Avenue and South Cactus Avenue," dated August 13, 2017, and included as *Technical Appendix H* to this EIR. This Subsection also relies on information contained in the County of San Bernardino General Plan (County of San Bernardino, 2014); the County of San Bernardino General Plan EIR (County of San Bernardino, 2007); and Google Earth Pro (Google Earth Pro, 2019). Refer to Section 7.0, *References*, for a complete list of reference sources.

For the purposes of this EIR, the term "toxic substance" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances.

For purposes of this EIR, the term "hazardous material" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness. Hazardous waste is defined in the California Code of Regulations, Title 22, § 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids), corrosivity (strong acids and bases), reactivity (explosives or generates toxic fumes when exposed to air or water), and toxicity (materials listed by the United States Environmental Protection Agency (USEPA) as capable of inducing systemic damage to humans or animals). Certain wastes are called "Listed Wastes" and are found in the California Code of Regulations, Title 22, §§ 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

4.8.1 EXISTING CONDITIONS

As described in detail in EIR Section 2.0 and illustrated on Figure 2-3, *Aerial Photograph*, the Project site is mostly vacant with the exception of four (4) single-family residences: two (2) on the western portion, one on the southeastern corner, and one on the northeastern portion of the Project site. The central portion of the Project site consists of former (fallow) agricultural land that is routinely maintained (i.e., disced) for weed abatement.

A. Historical Review, Regulatory Records Review, and Field Reconnaissance

1. Historical Review

SCS reviewed various sources of information to determine the historical use of the Project site, including historical aerial photographs, historical topographic maps, Environmental Data Resources (EDR)-Sanborn collection of regulatory database records, city directories, historical site occupants,

and historical site ownership records. Refer to *Technical Appendix H* of this EIR for a more detailed description of SCS's research results.

The Project site was undeveloped in 1901 and, by 1938, the site contained orchards on the western and eastern portions of the site (but not the central) and one (1) small farmhouse on the eastern portion of the site (abutting the location of present-day Cactus Avenue). By 1948, orchards were expanded to cover the entire Project site and the site remained unchanged until 1975, when the orchards were cleared from the eastern portion of the site. By 1989, a single-family residence was constructed among the orchards on the western portion of the site. Between 1994 and 2005, a single-family home was constructed at the southeast corner of the Project site and the small farmhouse that first appeared on the site in 1938 was demolished and replaced with a new house. Also, between 1994 and 2005, the orchards were mostly cleared from the western and central portions of the site. By 2009, a second single-family residence was constructed on the western portion of the site, bringing the total number of residences on the Project site to four. (SCS, 2018, pp. 8-11)

The area surrounding the Project site was primarily used for orchards by 1938. By 1948, Interstate 10 appears north of the Project site but orchards remained the predominate use in the area surrounding the site until at least 1953. By 1959, tract housing is present southwest of the Project site. The Union Pacific West Colton Yard was constructed between 1968 and 1975. Over the next 40+ years the remaining orchards to the south of the Project site were cleared and converted to single-family residences and the remaining orchards west and east of the Project site were cleared and converted to commercial and industrial uses. One of the sites to the east of the Project site has been developed as a petroleum company (likely for fueling trucks) since at least the 1980s. (SCS, 2018, p. 11)

2. Regulatory Records Review

SCS researched federal, State, and local environmental records databases to identify properties within one mile of the Project site with reported environmental issues. A summary of the research results is provided below. A detailed description of the environmental record review results is included in Appendix E of *Technical Appendix H* of this EIR.

The Project site was not identified on any federal, State or local environmental records database; but, one property, the Union Pacific West Colton Yard, is listed on several databases for: 1) the release of petroleum hydrocarbons at its maintenance shop in the 1980s; 2) the discharge of oily water to a municipal storm drain in 2010; 3) the discharge of liquid asphalt, crude oil, diesel, lube oil, and/or alcohol in 2014/2015; 4) its use of above-ground storage tanks (ASTs); 5) its storage of hazardous substances; and 6) its status as a large quantity hazardous waste generator. The past releases at the West Colton Yard do not appear to have adversely affected the Project site. (SCS, 2018, p. 13) In addition, three non-highly volatile liquid product pipelines are located beneath Slover Avenue and abut the Project site on the north. There were no records of accidents or releases associated with these pipelines and the presence of these pipelines is not anticipated to adversely affect the Project site. (SCS, 2018, pp. 14-15)

3. *Field Reconnaissance*

SCS conducted an inspection of the Project site and surrounding area on August 4, 2017. During the site inspection, SCS observed the property to consist of mainly fallow agricultural land (although a few orange trees remain scattered across the property), four (4) detached residences, and several detached residential outbuildings. A few out-of-service smudge pots, which were historically used to burn oil to prevent frost damage to the on-site orchards, and electric fans were observed on the central and western portions of the site. Although oil was historically used/stored on the Project site for use in the smudge pots, no indications of bulk storage or releases of oil (stained soil, odors, etc.) were noted. Out-of-service concrete floor irrigation piping (i.e., standpipes) was observed along the northern Project site boundary and at various locations on the property. A few drums of concrete curing compound (typically resins, acrylic or wax compounds) were observed on the southern portion of the Project site. An AST was observed at one residence on the Project site; the owner of the AST stated that it has never been used to store hazardous substances at the property. Common household hazardous materials, which included household cleaning supplies and small containers of gasoline, are stored in the residences at the property. There were no indications of mishandling chemicals or household hazardous materials on the Project site (e.g., spills or stains). No evidence of underground storage tanks (USTs), natural waterways, disturbed areas, landfilled materials, elevators or hydraulic equipment, groundwater supply or monitoring wells, or industrial wastewater were found on the Project site. Power poles with overhead powerlines and electrical transformers (operated by Southern California Edison) were observed on the property; however, the observed transformers are not believed to contain high concentrations of polychlorinated biphenyls (PCBs) because SCE exclusively utilizes mineral oils as the insulating/cooling fluid for electrical transformers. (SCS, 2018, pp. 5-7)

B. *Airport Hazards*

The Project site is located within the airport influence area (AIA) of the Ontario International Airport (ONT) and is subject to the Ontario International Airport Land Use Compatibility Plan (ALUCP). The Project site is not located within any Safety Zone, Noise Impact Zone, or Airspace Protection Zone for the ONT but is located in an area that requires overflights to be disclosed during real estate transactions. (City of Ontario, 2010, Policy Maps 2-1 to 2-5)

C. *Wildland Fire Hazards*

The Project site does not contain nor is it located adjacent to any wildlands. According to the California Department of Forestry and Fire Protection (CalFire), the Project site is located within a non-very high fire hazard severity zone and is not located within a State Responsibility Area (SRA) (CalFire, 2008).

4.8.2 Applicable Environmental Plans, Policies, and Regulations

Hazardous materials and hazardous wastes are regulated by various federal, State, and local regulations to protect public health and the environment. This section summarizes the overall

regulatory framework governing hazardous materials management that is applicable to the Project and the Project site.

A. Federal Plans, Policies, and Regulations

1. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Superfund Amendments and Reauthorization Act (SARA)

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. (EPA, 2018a)

The EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, the EPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The EPA also recovers costs from financially viable individuals and companies once a response action has been completed. (EPA, 2018a)

The EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies. (EPA, 2018a)

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Also, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). (EPA, 2018a)

2. Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) gives the EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. (EPA, 2018b)

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. (EPA, 2018b)

3. *Hazardous Materials Transportation Act (HMTA)*

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property." (OSHA, n.d.)

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 CFR Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177 (OSHA, n.d.)

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts State and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement. (OSHA, n.d.)

4. *Hazardous Materials Transformation Uniform Safety Act of 1990*

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. (OSHA, n.d.)

The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. (OSHA, n.d.)

5. *Occupational Safety and Health Act (OSHA)*

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. (EPA, 2017d)

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states.

6. Toxic Substances Control Act

The Toxic Substances Control Act of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint. (EPA, 2018c)

Various sections of the TSCA provide authority to:

- Require, under Section 5, pre-manufacture notification for "new chemical substances" before manufacture
- Require, under Section 4, testing of chemicals by manufacturers, importers, and processors where risks or exposures of concern are found
- Issue Significant New Use Rules (SNURs), under Section 5, when it identifies a "significant new use" that could result in exposures to, or releases of, a substance of concern.
- Maintain the TSCA Inventory, under Section 8, which contains more than 83,000 chemicals. As new chemicals are commercially manufactured or imported, they are placed on the list.
- Require those importing or exporting chemicals, under Sections 12(b) and 13, to comply with certification reporting and/or other requirements.
- Require, under Section 8, reporting and record-keeping by persons who manufacture, import, process, and/or distribute chemical substances in commerce.
- Require, under Section 8(e), that any person who manufactures (including imports), processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment to immediately inform EPA, except where EPA has been adequately informed of such information. EPA screens all TSCA b§8(e) submissions as well as voluntary "For Your Information" (FYI) submissions. The latter are not required by law but are submitted by industry and public interest groups for a variety of reasons. (EPA, 2018c)

B. State Plans, Policies, and Regulations

1. Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for

promulgating State safety and health standards and reviewing variances. It also has an Appeals Board to adjudicate contested citations and the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace.

Pursuant to 29 CFR 1952.172, the California State Plan applies to all public and private sector places of employment in the State, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the State authorized to adopt, amend, or repeal occupational safety and health standards or orders. In addition, the Standards Board maintains standards for certain things not covered by federal standards or enforcement, including: elevators, aerial passenger tramways, amusement rides, pressure vessels and mine safety training. The Cal/OSHA enforcement unit conducts inspections of California workplaces in response to a report of an industrial accident, a complaint about an occupational safety and health hazard, or as part of an inspection program targeting industries with high rates of occupational hazards, fatalities, injuries or illnesses.

2. California Hazardous Waste Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Article 2, Section 25100, *et seq.*) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law (RCRA).

3. California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substances Control (DTSC) regulates hazardous waste more stringently than the EPA, the integration of State and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as "Title 22."

C. Local Plans, Policies, and Regulations

1. Local Permitting Requirements

The aforementioned federal and State hazardous materials regulations require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to obtain a hazardous materials permit and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance with all applicable hazardous materials regulations. The CUPA is the San Bernardino County Fire Department, Hazardous Materials Division. The San Bernardino County Fire Department, Hazardous Materials Division also manages the following hazardous waste programs: 1) Hazardous Materials Release Response Plans and Inventory; 2) California Accidental Release Program; 3) Underground Storage Tanks; 4) Aboveground Petroleum Storage Act/Spill Prevention, Control, and Countermeasure Plan; 5) Hazardous Waste Generation and Onsite Treatment; and 6) Hazardous Materials Management Plans and Inventory.

2. Ontario International Airport Land Use Compatibility Plan

The ONT ALUCP identifies land use standards and design criteria for new development located in the proximity of the airport to ensure compatibility between the airport and surrounding land uses and to maximize public safety. As mentioned in Subsection 4.8.1B, the Project site is located within the AIA of the ONT and is subject to the ONT ALUCP. The Project site is not located within any Safety Zone, Noise Impact Zone, or Airspace Protection Zone for the ONT but is located in an area that requires overflights to be disclosed during real estate transactions. (City of Ontario, 2010, Policy Maps 2-1 to 2-5)

3. County of San Bernardino Development Code Sections 23.0107 and 23.0602

The County of San Bernardino Development Code Section 23.0107 prohibits the storage of hazardous materials in all areas and locations where the presence of hazardous materials would create an unacceptable threat to the occupants and property owners. The County of San Bernardino Development Code Section 23.0602 requires the person or entity of each activity or facility to obtain a Certified Unified Program Agency (CUPA) permit for reporting and permitting the use, handling, storage, and transportation of hazardous materials. (County of San Bernardino, 2019)

4. SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities

Rule 1403 requires the implementation of specific work practices to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials (ACWM). (SCAQMD, 2007)

4.8.3 Basis for Determining Significance

The proposed Project would result in a significant impact to hazards and hazardous materials if the Project or any Project-related component would:

a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*

b. *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;*

c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*

d. *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;*

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;*

f. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*

g. *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to hazards and hazardous materials that could result from development projects.

4.8.4 Impact Analysis

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?***
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?***

Implementation of the Project would require demolition and removal of all existing structures and improvements from the Project site and would result in the construction and long-term operation of a warehouse building on the site. Were any hazards or hazardous materials to be present on the Project site or any hazardous materials used/stored on the Project site during construction or long-term operation, the Project would have the potential to expose workers on-site, the public, and/or the

environment to a substantial hazard. The analysis below evaluates the potential for the Project to result in a substantial hazard to people or the environment during any stage of the Project.

A. Impact Analysis for Existing Site Conditions

As discussed in Subsection 4.8.1, the Project site contains no evidence of RECs, USTs, PCBs, or significant chemical release/disposal on the Project site.

An AST was observed at one residence on the Project site; however, based on an interview with the property owner, the AST has never been used to store hazardous substances at the property. Accordingly, the presence and removal of the AST would not create a negative adverse effect to the environment. (SCS, 2018, p. 7) Notwithstanding, the existing AST would be required to be removed, handled, and disposed in accordance with all applicable local and State regulations as part of the Project's demolition phase of construction. These regulations are discussed above in Subsection 4.8.2. Accordingly, implementation of the Project would not expose the public or the environment to significant hazards associated with the removal and disposal of the on-site AST.

Because the Project site was used in the past for agricultural activities, there is the potential that pesticides were used on the property. SCS did not observe any signs of any pesticide use, storage, or mismanagement on the Project site associated with the former agricultural use. The types of pesticides most commonly associated with adverse human health effects (organochlorides such as DDT and dieldrin) were banned from agricultural use in the early 1970s. Given the rate of degradation for organochloride pesticides, the amount of time that has passed since these pesticides could have, theoretically, been applied to the site, the Project site likely only contains trace concentrations of pesticides – if any at all. In SCS's experience it is not uncommon to find trace amounts of pesticides in the soils of former agricultural areas in Southern California, but that trace concentrations of pesticides do not represent a hazard to future industrial warehouse uses of the Project site and, also, do not represent a hazard to the environment or to people who live near the Project site or may work on the site. (SCS, 2018, p. 11)

The use of asbestos containing materials (ACMs) (a known carcinogen) and lead paint (a known toxin) was common in building construction prior to 1978. Because the structures on the Project site were constructed after 1978, there is no potential for ACMs and/or lead paint to be present in the structures on the Project site. Notwithstanding, concrete irrigation standpipes were observed on the Project site and it is possible that more concrete irrigation pipes are located below the ground surface. The date the concrete standpipes were installed on the Project site are not known; but, by 1938, the site was used for agriculture and it is possible the standpipes were installed at that time. ACMs were commonly added to concrete products through the 1950s; therefore, there is the potential for ACMs to be present in the concrete standpipes observed on the site and in subsurface concrete irrigations lines (if any exist on the site) that would be demolished during Project construction. Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the federal Environmental Protection Agency (EPA). Federal asbestos requirements are found in National Emission Standards for Hazardous Air Pollutants (NESHAP) within the Code of Federal Regulations (CFR) Title 40, Part

61, Subpart M, and are enforced in the Project area by the SCAQMD. In conformance with the NESHAP, SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the concrete standpipes located on the Project site, then Rule 1403 requires notification of the SCAQMD prior to commencing any demolition or renovation activities. Rule 1403 also sets forth specific procedures for the removal of asbestos, and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because the Project would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to potential asbestos exposure would be less than significant.

Lastly, three non-highly volatile liquid product pipelines are located beneath Slover Avenue and abut the Project site on the north. The Project does not propose any activities that would impact or modify the existing pipelines beneath Slover Avenue and there were no records of accidents or releases associated with these pipelines that adversely affect the Project site. (SCS, 2018, pp. 14-15)

B. Impact Analysis for Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the Project site during construction of the Project. This heavy equipment likely would be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which are considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be used on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the EPA and DTSC, as well as the Santa Ana RWQCB pertaining to ware quality as discussed in Subsection 4.9, *Hydrology and Water Quality*. With mandatory compliance with applicable hazardous materials regulations, the Project would not create significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. A less-than-significant impact would occur.

C. Impact Analysis for Long-Term Operation

The future building user(s) that would occupy the proposed warehouse building is not yet known. However, the future building occupant(s) likely will include general warehousing, industrial, manufacturing, assembly, and/or similar uses and it is possible that hazardous materials could be

used during the course of a future building user's daily operations. State and federal Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that requires businesses to plan and prepare for possible chemical emergencies. Any business that occupies the warehouse building on the Project site and that handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) will require a permit from the San Bernardino County Fire Department Hazardous Materials Division in order to register the business as a hazardous materials handler. Such businesses also are required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which requires immediate reporting to the County of San Bernardino Fire Department and the State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business. In addition, any business handling at any one time, greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under Assembly Bill 2185 (AB 2185), to file a Hazardous Materials Business Emergency Plan (HMBEP). A HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of a hazardous material. The intent of the HMBEP is to satisfy federal and State Community Right-To-Know laws and to provide detailed information for use by emergency responders.

If a business that uses or stores hazardous materials occupies the proposed warehouse building on the Project site, the business owner(s) and operator(s) would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials, nor would the Project increase the potential for accident conditions which could result in the release of hazardous materials into the environment. In addition, the Project would be required to comply with County of San Bernardino Development Code § 23.0107, which establishes specific requirements for the storage of hazardous materials and Development Code § 23.0602, which establishes requirements for reporting and permitting the use, handling, storage, and transportation of hazardous materials.

With mandatory regulatory compliance, along with mandatory compliance with the County of San Bernardino Development Code, potential hazardous materials impacts associated with long-term operation of the Project are determined to be less than significant and mitigation is not required.

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?***

No existing or proposed schools are located within one-quarter mile of the Project site. The nearest operating school to the Project site is Slover Mountain High School, located at 18829 Orange Street, approximately 0.50-mile northwest of the Project site (Google Earth Pro, 2019). The next closest school is Joe Baca Middle School located approximately 0.6-mile northeast of the Project site.

Accordingly, the proposed Project has no potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, and/or wastes within one-quarter mile of an existing or proposed school.

As described above under the analysis for Thresholds "a" and "b," the transport of hazardous substances or materials to-and-from the Project site during construction and long-term operational activities would be required to comply with applicable federal, State, and local regulations to preclude substantial public safety hazards. Accordingly, there would be no potential for existing or proposed schools to be exposed to substantial safety hazards associated with the routine transport of hazardous substances or materials to-and-from the Project site. Thus, no impact would occur and no mitigation is required.

Refer to EIR Subsection 4.2, *Air Quality*, for analysis pertaining to human health risks associated with air pollutant emissions associated with the Project, including risks to the maximally exposed school child receptors located more than one-quarter mile from the Project site (but within one-quarter-mile of Slover Avenue, a primary truck travel route to/from the Project site). As concluded in EIR Subsection 4.2, *Air Quality*, the Project's toxic air contaminant emissions (and their associated health risks) would be less than significant to all sensitive receptors, including school child receptors, near the Project site and the primary truck travel routes to/from the Project site.

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 Project site is not located on any list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (DTSC, 2019; SCS, 2018, p. 14). Accordingly, 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 Project site is located within the AIA of the ONT ALUCP. The portion of the AIA that the Project site is located within does not impose any land use or design restrictions and building heights are permitted to exceed 200 feet. Furthermore, the Project site is not located within any Safety Zone, Noise Impact Zone, or Airspace Protection Zone for the ONT but is located in an area that requires overflights to be disclosed during real estate transactions. (City of Ontario, 2010, Policy Maps 2-1 to 2-5; Google Earth Pro, 2019) Accordingly, implementation of the Project would not result in a safety hazard for people living or working on the Project area and impacts would be less than significant.

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 of the Project, adequate emergency access for emergency vehicles would have to be maintained along public streets that abut the Project site. As part of the County's discretionary review process, the County of San Bernardino reviewed the Project's application materials to ensure that appropriate emergency ingress and egress would be available to-and-from the Project site and that circulation on the Project site was adequate for emergency vehicles. Accordingly, implementation of the proposed 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 CalFire nor the County of San Bernardino identify the Project site within an area susceptible to wildland fires and the Project site and surrounding areas generally consist of agricultural, industrial and/or residential uses, which are generally not associated with wildland fire hazards. (Google Earth Pro, 2019; CalFire, 2008) Accordingly, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

4.8.5 Cumulative Impact Analysis

As discussed above under Thresholds "a" and "b," although the future occupant(s) of the proposed warehouse building is not presently known, if a business that uses or stores hazardous materials occupies the Project site, the business owner and operator would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, and disposal of hazardous substances. Such uses also would be subject to additional review and permitting requirements by the San Bernardino County Fire Department. Similarly, any other developments in the area proposing the construction of uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, State, and local regulations, and such uses would be subject to additional review and permits from their local oversight agency. Therefore, the potential for release of toxic substances or hazardous materials into the environment, either through accidents or due to routine transport, use, or disposal of such materials, would be reduced to a less-than-cumulatively-significant level. Accordingly, the Project's potential to contribute to a cumulatively significant hazardous materials impact would be less than significant.

The Project site is not located within one-quarter mile of an existing or planned school; therefore, the Project would not contribute to a cumulatively significant hazards/hazardous materials impact on any public or private schools located within a one-quarter mile radius of the site.

The Project site is not located on the list of hazardous materials sites compiled pursuant to Government Code § 65962.5. In the unlikely event that hazardous materials are encountered beneath the surface of the site during grading or construction, the materials would be handled and disposed of in accordance with regulatory requirements. Therefore, the Project would not contribute to a cumulatively significant hazardous materials impact associated with a listed hazardous materials site.

The Project site is located within a portion of the ONT AIA that would not impose any land use or design restrictions. Therefore, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area. The Project would not contribute to a cumulatively significant hazardous materials impact associated with airport hazards.

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route; thus, there is no potential for the Project to contribute to any cumulative impacts associated with an adopted emergency response plan or emergency evacuation plan.

As discussed above under Threshold "g," the Project site is not located within or in close proximity to areas identified as being subject to wildland fire hazards. Additionally, as the surrounding area continues to develop, lands that are currently vacant would be developed in a manner consistent with jurisdictional requirements for fire protection, and would generally decrease the fire hazard potential in the local area. As such, within the cumulative context of the Project vicinity, fire hazards are anticipated to decline over time, and the Project's contribution to cumulative wildfire potential is less than cumulatively-considerable.

4.8.6 Significance of Impacts Before Mitigation

Threshold a and b: Less-than-Significant Impact. During Project construction and operation, mandatory compliance to federal, State, and local regulations would ensure that the proposed Project would not create a significant hazard to the environment due to routine transport, use, disposal, or upset of hazardous materials.

Threshold c: No Impact. The Project site is not located within one-quarter mile of any existing or proposed school. Accordingly, the 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.

Threshold d: No Impact. The Project site is not located on any list of hazardous materials sites complied pursuant to Government Code § 65962.5.

Threshold e: Less-than-Significant Impact. The Project site is located within a portion of the ONT AIA that does not impose any land use or design restrictions. As such, the Project would not result in an airport safety hazard for people residing or working in the Project area.

Threshold f: Less-than-Significant Impact. The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, adequate emergency vehicle access is required to be provided. Accordingly, implementation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.

Threshold g: No Impact. The Project site is not located in close proximity to wildlands or areas with high fire hazards. Thus, the Project would not expose people or structures to a significant wildfire risk.

4.8.7 MITIGATION

Impacts would be less than significant; therefore, mitigation is not required.

4.9 HYDROLOGY AND WATER QUALITY

Information in this Subsection relies on two technical reports prepared for the Project by Thienes Engineering (hereafter, "Thienes"): 1) "Preliminary Hydrology Calculations for Alere Slover and Cactus San Bernardino, California," dated June 11, 2018 (Thienes, 2018) and 2) "Preliminary Water Quality Management Plan For: Alere Slover and Cactus," dated September 6, 2017 (Thienes, 2017). These reports are provided as *Technical Appendices I1 and I2* to this EIR, respectively.

The Project site is located within the Santa Ana River watershed and is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB). As such, information in this Subsection also was obtained from the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Plan* (updated February 2016) and the *Integrated Regional Water Management Plan* (IRWMP) for the Santa Ana River watershed (also referred to as "One Water One Watershed Plan Update 2018," (February 19, 2019) prepared by the Santa Ana Watershed Project Authority (SAWPA) (SAWPA, 2019). These documents are herein incorporated by reference and are available for public review at the physical locations and website addresses given in EIR Section 7.0, *References*.

4.9.1 EXISTING CONDITIONS

A. Regional Hydrology

The Project site is located within the Santa Ana River watershed, which drains a 2,650 square-mile area and is the principal surface flow water body within the region. The Santa Ana River rises in Santa Ana Canyon in the southern San Bernardino Mountains and runs southwesterly across San Bernardino, Riverside, and Orange Counties, where it discharges into the Pacific Ocean at the City of Huntington Beach. The total length of the Santa Ana River and its major tributaries is approximately 700 miles. (SAWPA, 2019, p. 1) The Project site's location within the Santa Ana River watershed is depicted on Figure 4.9-1, *Santa Ana River Watershed* Map.

B. Site Hydrology

As illustrated on Figure 4.9-2, *Existing Conditions Hydrology Map*, the majority of the Project site generally drains southeasterly as sheet flow towards Cactus Avenue ("eastern watershed"). The western portion of the site drains southerly then westerly toward the southwest corner of the Project site ("western watershed"). The peak runoff discharged from the eastern watershed during a 100-year storm is calculated to be 22.7 cubic feet per second (cfs) under existing conditions. The peak runoff discharged from the western watershed during a 100-year storm is calculated to be 4.4 cfs under existing conditions. The total peak runoff discharged from the Project site under existing conditions during a 100-year storm is 27.1 cfs. (Thienes, 2018) There is no public storm water drainage system in the vicinity of the Project site. Stormwater is conveyed downstream as aboveground flow via the existing curb and gutter system.

C. Flooding

The Project site spans two Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels: northern portion of the Project site is located within FIRM Panel No. 06071C8659H, dated August 28, 2008, and the southern portion of the Project site is located within FIRM Panel No. 060701C8667H, dated August 28, 2008. According to both FIRMs, the entire Project site is located within "Zone X (unshaded)," which corresponds to areas with minimal flood hazard outside of the 500-year floodplain (also referred to as the 0.2% annual chance floodplain). No portions of the Project site are located a 100- year flood hazard area.

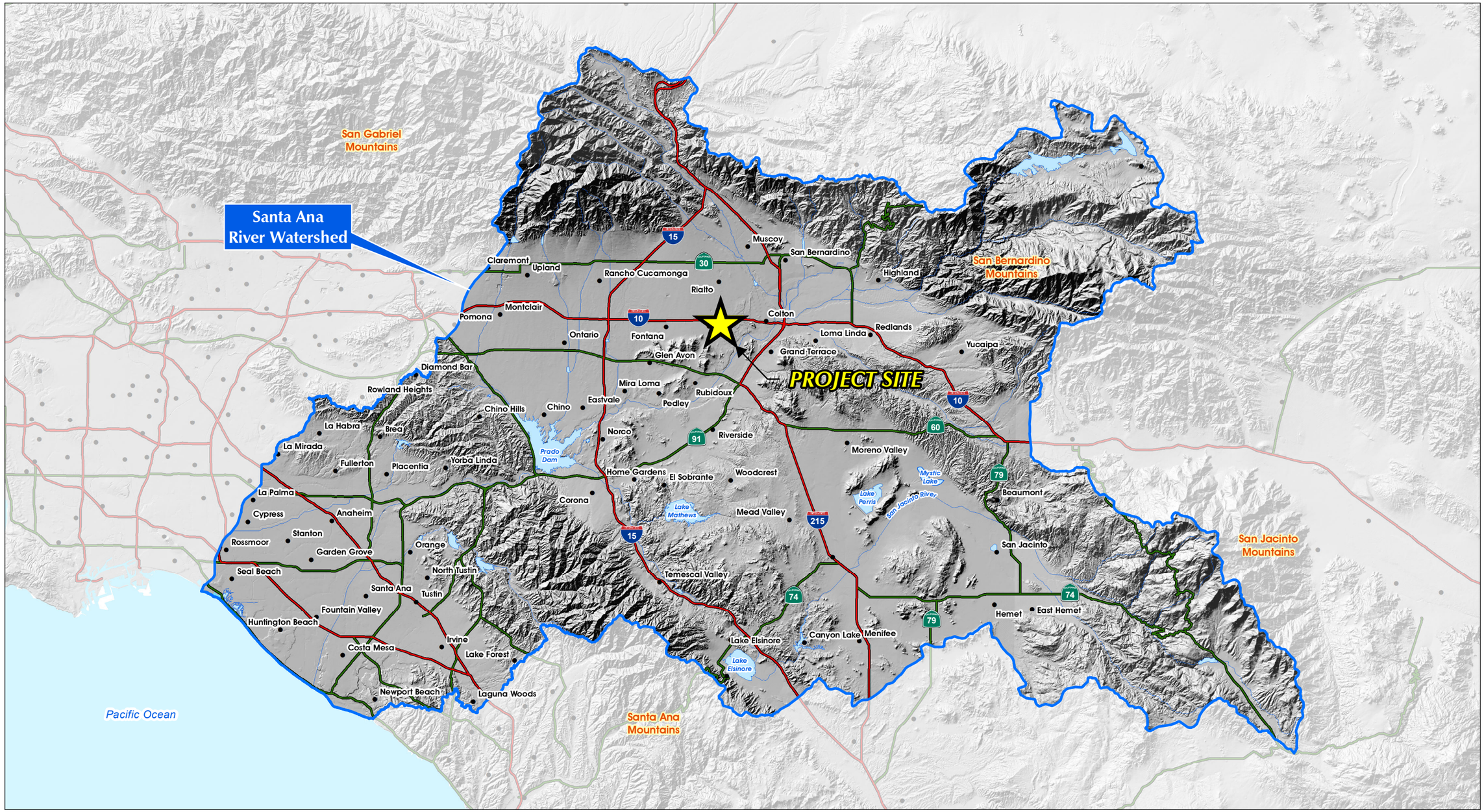
D. Water Quality

The Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act, CWA) requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards due to excessive concentrations of pollutants are placed on a list of impaired waters pursuant to Section 303(d) of the CWA. The Project site's receiving waters include the Santa Ana River, Prado Dam, and Pacific Ocean. Downstream of the Project site the Santa Ana River watershed is included on the CWA's Section 303(d) list of impaired waters because of excessive concentrations of four (4) pollutants ("Pollutants of Concern"), including pathogens, copper, lead, and indicator bacteria. (Thienes, 2017, p. 3-3)

E. Groundwater

The County of San Bernardino is underlain by groundwater resources associated with the Upper Santa Ana Valley Groundwater Basin, which consists of six (6) subbasins. The Project site is located within the Riverside North area of the Riverside-Arlington Subbasin that was adjudicated by the 1969 Western-San Bernardino Judgment (DWR, n.d.). The Riverside-Arlington Subbasin is replenished by infiltration from Santa Ana River flow, underflow past the Rialto-Colton fault, intermittent underflow from the Chino Subbasin, return irrigation flow, and deep percolation of precipitation. Extractions from the Riverside North Basin for use in San Bernardino County are unlimited, provided that water levels at three index wells in the Rialto-Colton and Riverside North Basins stay above 822.04 feet mean sea level (MSL). (RMC, 2015, p. 2-12)

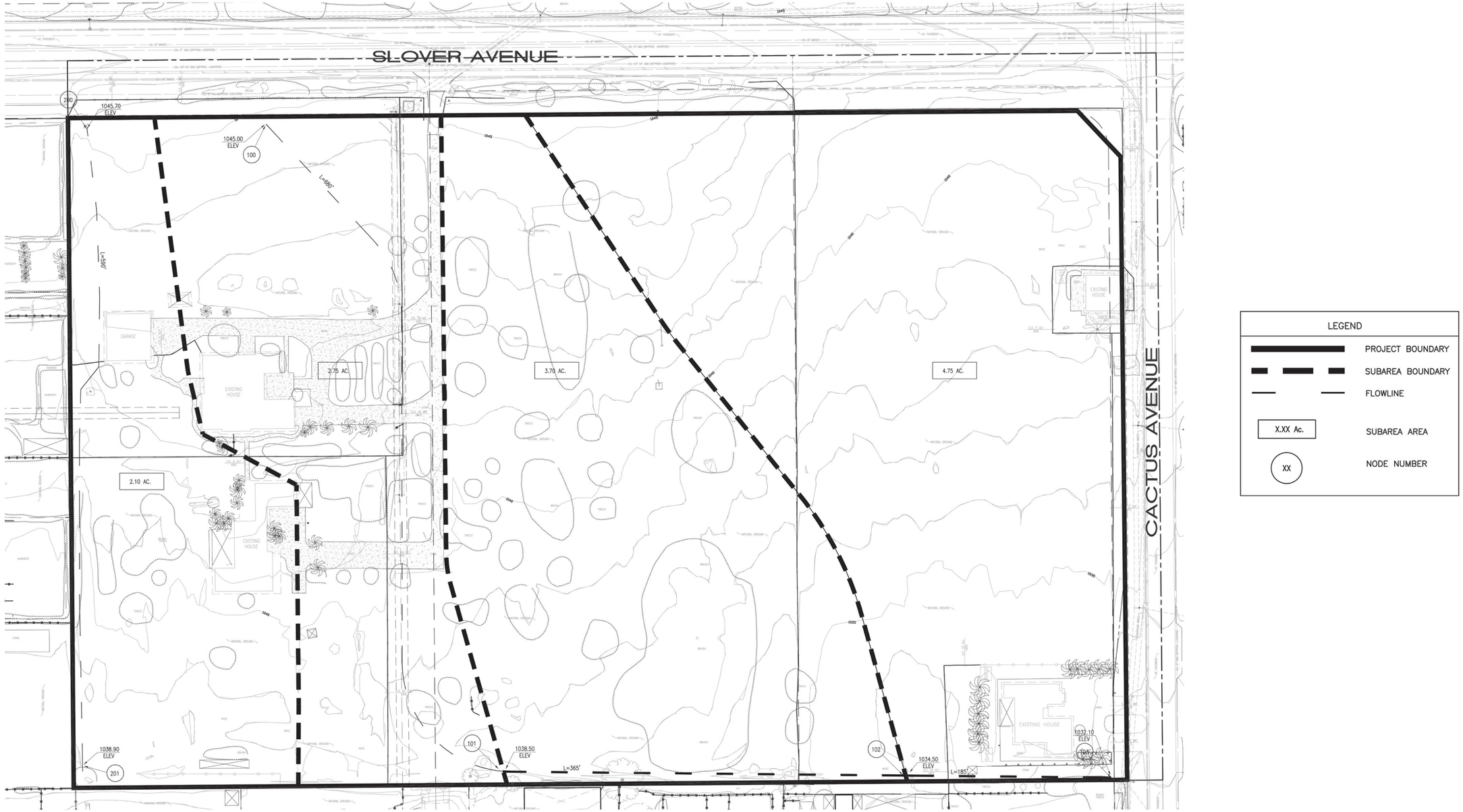
According to the geotechnical report prepared for the Project site by Norcal Engineering, no groundwater was encountered during subsurface borings on the site (which extended up to 18.5 feet below the ground surface). Based on data from monitoring wells located approximately 0.75-mile northwest and 1.25 miles southeast of the Project site, respectively, groundwater is expected in the Project area at depths ranging between 100 to 200 feet below the ground surface of the vicinity. (Norcal Engineering, 2017a, p. 4)



Source(s): ESRI, RCTLMA (2018)

Figure 4.9-1

Santa Ana River Watershed Map



Source(s): Thienes Engineering, Inc. (06-11-2018)

Figure 4.9-2

Not to Scale

Existing Conditions Hydrology Map

4.9.2 Applicable Environmental Plans, Policies, and Regulations

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

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 significantly 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, 2018d)

B. State Plans, Policies, and Regulations

1. Porter-Cologne Water Control 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 § 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 Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Boards decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions

within each of nine hydrologic regions. The State Water Board and Regional Water Boards have numerous non-point source (NPS) related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of 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 Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (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 implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify 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. (SWRCB, 2014) The Project site and vicinity are located in the Santa Ana River Watershed, which is within the purview of the Santa Ana RWQCB. The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region.

2. California Water Code

The California Water Code is the principal state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the Regional Water Quality Control Board (RWQCB); water supply and wastewater treatment agencies; and city and county governments. The principal

means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water.

3. California Toxics Rule (CTR)

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016a)

4. CDFG Code Section 1600 et seq. (Lake or Streambed Alteration Agreement Program)

Fish and Game Code § 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream, or lake. (CDFW, 2018a)

It should be noted 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, 2018a)

CDFW requires a Lake and Streambed Alteration (LSA) Agreement when it determines that the activity, as described in a complete LSA Notification, may substantially adversely affect existing fish or wildlife resources. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify a project that would eliminate or reduce harmful impacts to fish and wildlife resources. Before issuing an LSA Agreement, CDFW must comply with CEQA. (CDFW, 2018a)

5. *Watershed Management Initiative (WMI)*

The State and Regional Water Boards are currently focused on looking at entire watersheds when addressing water pollution. The Water Boards adopted the Watershed Management Initiative (WMI) to further their goals. The WMI establishes a broad framework overlying the numerous federal and state mandated priorities. As such, the WMI helps the Water Boards achieve water resource protection, enhancement and restoration while balancing economic and environmental impacts. (SWRCB, 2017) The integrated approach of the WMI involves three main ideas:

- Use water quality to identify and prioritize water resource problems within individual watersheds.
- Involve stakeholders to develop solutions.
- Better coordinate point source and nonpoint source regulatory efforts.
- Establish working relationships between staff from different programs.
- Better coordinate local, State, and federal activities and programs, especially those relating to regulations and funding, to assist local watershed groups. (SWRCB, 2017)

C. *Local Plans, Policies, and Regulations*

1. *County of San Bernardino Municipal Code*

Chapter 35.01 *et seq.* (Pollutant Discharge Elimination System Regulations) of the County of San Bernardino Municipal Code requires the County to participate as a "Co-permittee" under the NPDES permit program to accomplish the requirements of the CWA. Pursuant to this chapter, the County is required to participate in the improvement of water quality and comply with federal requirements for the control of urban pollutants to stormwater runoff. (County of San Bernardino, 2019)

The County of San Bernardino Municipal Code Section 85.11.030 also requires all projects involving construction activity to obtain an erosion control plan to minimize water and wind-blown erosion.

4.9.3 Basis for Determining Significance

The proposed Project would result in a significant impact to hydrology and water quality if the Project or any Project-related component would:

a. Violate any water quality standards or water discharge requirements or otherwise substantially degrade surface or groundwater quality;

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin;

c. *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:*

   i. *Result in substantial erosion or siltation on- or off-site;*
   ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*
   iii. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
   iv. *Impeded or redirect flood flows.*

d. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation; or*

e. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to hydrology and water quality that could result from development projects.

4.9.4 IMPACT ANALYSIS

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

A. Construction-Related Water Quality Impacts

Development of the Project would involve demolition, clearing, grading, paving, utility installation, building construction, and landscaping activities, which have the potential to generate water quality pollutants such as silt, debris, organic waste, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during Project construction in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and County of San Bernardino Municipal Code Chapter 35.01 *et seq.*, the Project Applicant would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation, and disturb at least one (1) 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 will specify the Best Management Practices (BMPs) that would be required to be implemented 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. Examples of BMPs that may be utilized during construction include, but are not limited to, sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, and hydro-seeding. Pursuant to County of San Bernardino Municipal Code § 85.11.030, the Project Applicant also would be required to implement an erosion control plan to minimize water- and windborne erosion. Mandatory compliance with the SWPPP and the erosion control plan would ensure that the Project's implementation 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 and no mitigation measures would be required.

B. Post-Development Water Quality Impacts

Stormwater pollutants that may be produced during Project operation include pathogens, nutrients, noxious aquatic plants, sediments, metals, oil and grease, trash/debris, pesticides/herbicides, and organic compounds (Thienes, 2017, p. 2-2).

To meet the requirements of the County's NPDES permit and in accordance with County of San Bernardino Municipal Code Section 35.01.18, the Project Applicant would be required to prepare and implement a Water Quality Management Plan (WQMP), which is a Project 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, under long-term conditions via BMPs. Implementation of the WQMP ensures on-going, long-term protection of the watershed basin. The Project's Preliminary WQMP, prepared by Thienes, is included as *Technical Appendix I2* to this EIR. As identified in *Technical Appendix I2*, the Project is designed to include on-site structural source control BMPs consisting of an underground infiltration basin and detention basin. In addition, operational source control BMPs would be implemented, including but not limited to: the installation of water-efficient landscape irrigation systems, storm drain system stenciling and signage, energy dissipaters, and implementation of a trash and waste storage areas – to minimize, prevent, and/or otherwise appropriately treat stormwater runoff flows before they are discharged from the Project site. (Thienes, 2017, p. 4-4) Compliance with the Preliminary WQMP would be required by the County as a condition of approval for the Project. Long-term maintenance of proposed on-site water quality control features would be required by the County as a condition of approval to ensure the long-term effectiveness of all on-site water quality features and maximize pest management (particularly mosquito control).

In addition to mandatory implementation of a WQMP, the NDPES program also requires industrial land uses 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. Under the effective NPDES Industrial General Permit, the Project Applicant (or the Project's occupant(s)) 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 the operational activities of the building, and the Project's future building occupants and their operations are not known at this time, details of the SWPPP (including BMPs) or potential exemption

to the SWPPP operational activities requirement cannot be determined at this time. However, based on the requirements of the NPDES Industrial General Permit, it is assured that mandatory compliance with all applicable regulations would further reduce potential water quality impacts during long-term Project 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 West Valley Water District (WVWD), 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 a groundwater basin. Accordingly, implementation of the proposed Project would not substantially or directly decrease groundwater supplies and the Project's impact to groundwater supplies would be less than significant.

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 groundwater subbasin that underlies the Project site (i.e., Riverside North portion of the Riverside-Arlington Subbasin). Percolation is just one of several sources of groundwater recharge for the Subbasin. The Project would include the installation of a detention basin, an infiltration basin, and permeable landscape areas on the Project site to continue allowing the direct percolation of on-site storm water runoff into the Riverside-Arlington Subbasin. Based on the small size of the Project site in relation to the size of the groundwater basin and the design features proposed by the Project to allow percolation, implementation of the Project is determined to result in incremental changes to local percolation and would not result in substantial adverse effects to local groundwater recharge.

The Riverside North portion of the Riverside-Arlington Subbasin is an adjudicated basin; adjudicated basins are exempt from the 2014 Sustainable Groundwater Management Act (SGMA) because such basins already operate under a court-ordered management plan to ensure the long-term sustainability of the Subbasin. No component of the Project would obstruct with or prevent implementation of the management plan for the Riverside-Arlington Subbasin.

For the reasons stated above, the Project would not substantially decrease or deplete groundwater supplies, and would not interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

Threshold c: ***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:***

i. Result in substantial erosion or siltation on- or off-site?

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

iii. 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?

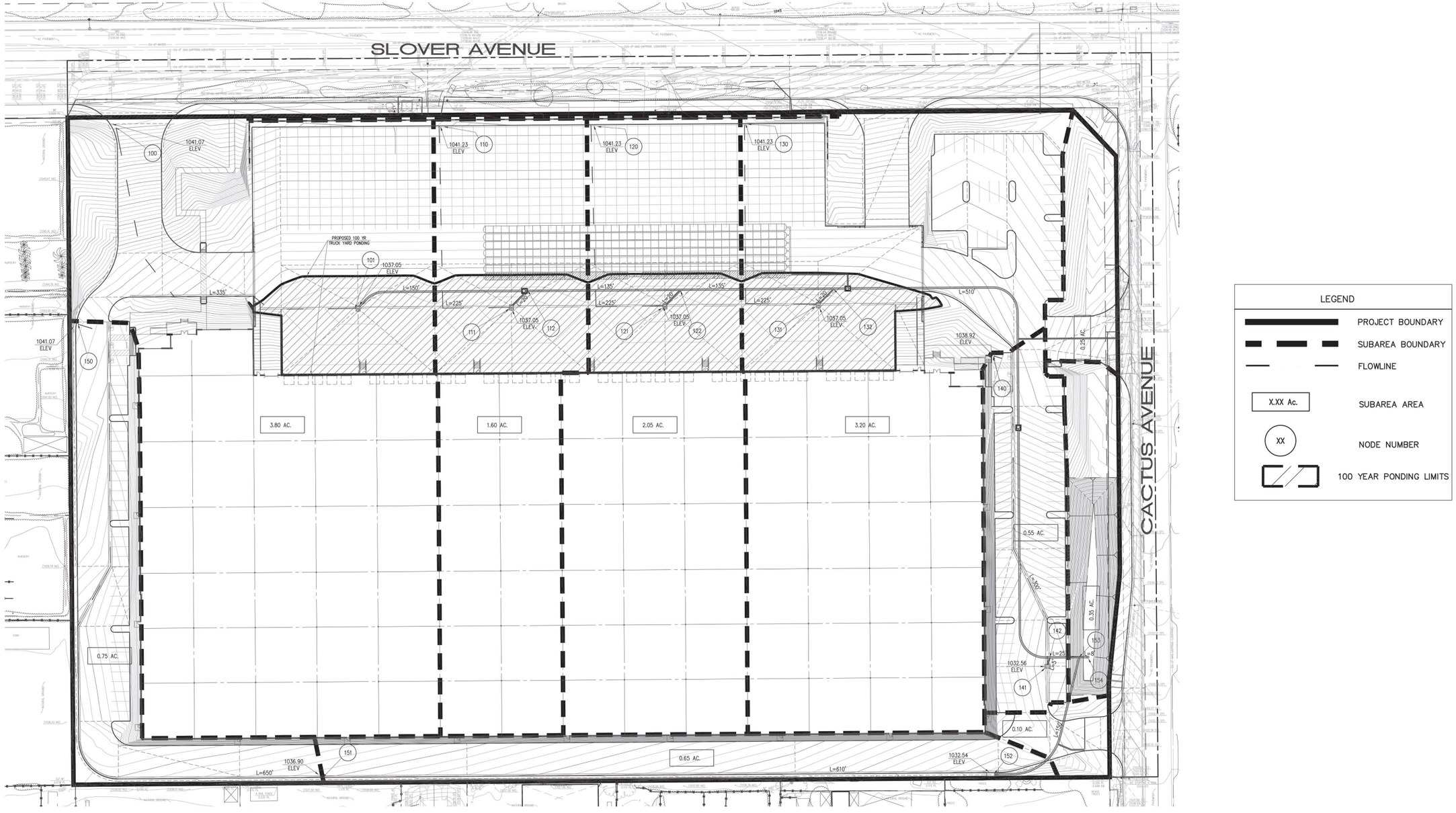
iv. Impede or redirect flood flows?

A. Erosion and Siltation

Development of the Project would alter existing ground contours of the Project site and would increase the impervious surface area on the site, all of which would result in changes to the existing drainage patterns interior to the site. Figure 4.9-3, *Proposed Post-Development Hydrology Map*, illustrates the post-development drainage conditions on the Project site.

The Project would include the installation of an integrated, on-site system of underground storm drain pipes, catch basins, an underground infiltration basin, and a detention basin to capture on-site stormwater runoff flows, convey the runoff across the site, and treat the runoff with BMPs to minimize the amount of water-borne pollutants carried from the Project site (as described in detail in EIR Section 3.0, *Project Description*). Upon development of the Project, all stormwater from the Project site would be discharged to Cactus Avenue at the southeast corner of the site (similar to what occurs under existing conditions).

Although the Project would alter the subject property's interior drainage patterns, such changes would not result in substantial erosion or siltation on- or off-site. Pursuant to County of San Bernardino Municipal Code Section 85.11.030, the Project's construction contractor would be required to implement an erosion control plan to minimize water- and windborne erosion during construction activities. Furthermore, as summarized in the Project's Preliminary WQMP (refer to *Technical Appendix I2*), the BMPs proposed for the Project site are effective at removing sediment from stormwater runoff during long-term operation (Thienes, 2017, pp. 4-2 and 4-3). Compliance with the WQMP, and long-term maintenance of on-site BMPs by the property owner or operator to ensure their long-term effectiveness, would be required by the County as a condition of Project approval (pursuant to Municipal Code Section 35.01.18). Therefore, stormwater runoff flows leaving the Project site would not carry substantial amounts of sediment. Impacts would be less than significant.



Source(s): Thienes Engineering, Inc. (06-11-2018)

Figure 4.9-3

Not to Scale

Proposed Post-Development Hydrology Map

B. Stormwater Runoff

As described above, proposed grading and earthwork activities and the addition of impervious surfaces on the Project site would alter the site's existing interior drainage characteristics but would not substantially alter the drainage pattern of the local area. The existing drainage pattern would not be wholly retained under Project conditions because the small amount of flows discharged at the southwest corner of the site would be diverted to Cactus Avenue, which is located at the southeast corner of the site.

The Project site's developed condition runoff flows would be captured by on-site catch basins and conveyed via underground storm drain pipes to an underground infiltration basin located in the north central portion of the site and, also, to a detention basin located in the southeast corner of the Project site. The detention basin would control the release of stormwater runoff from the Project site into Cactus Avenue during peak storm events. During peak storm events when the infiltration basin and detention basin are filled, stormwater would be temporarily detained – or pond – in the truck court (located in the northern portion of the site) with a ponding depth of approximately 0.65 feet before ultimately, and gradually, discharging to Cactus Avenue. Total peak flows leaving the Project site, all of which would be discharged to Cactus Avenue, would be 19.0 cfs, which is less than the 22.7 cfs that is discharged from the site to Cactus Avenue under existing conditions (and less than the total peak flows – 27.1 cfs – discharged from the site under existing conditions). Based on the foregoing information, development of the Project site as proposed would not substantially alter the existing drainage pattern of the subject property or substantially increase the rate or amount of surface water runoff from the site in a manner that would result in flooding on- or off-site. Accordingly, a less-than-significant impact would occur.

C. Stormwater Drainage System Capacity & Polluted Runoff

There is no public stormwater drainage system in the vicinity of the Project site; stormwater runoff is conveyed downstream as aboveground flow via the existing curb and gutter system. As discussed above, peak runoff flows leaving the Project site under post-development conditions would be approximately 30% less than what is discharged from the Project site under existing conditions. Accordingly, there is no potential for the Project's contribute stormwater runoff to an existing stormwater drainage system that would exceed the system's available capacity. No impact would occur.

As discussed in detail earlier under this Threshold (refer to sub-item "A"), the Project's construction contractors would be required to comply with a SWPPP and the Project's owner or operator would be required to comply with the Preliminary WQMP (*Technical Appendix I2*) to ensure that Project-related construction activities and operational activities do not result in substantial amounts of polluted runoff. Impacts would be less than significant.

D. Flood Flows

According to the FEMA Flood Insurance Rate Map (FIRM) Nos. 06071C8659H and 060701C8667H, the Project site is not located within a 100-year flood hazard area (FEMA, 2008).

Accordingly, the Project would have no potential to 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 Pacific Ocean is located more than 45 miles west of the Project site; consequently, there is no potential for the Project site to be inundated by a tsunami. The nearest large bodies of surface water are approximately 15.0 miles southwest of the Project (Lake Mathews) and approximately 18.0 miles southeast of the Project (Lake Perris), respectively, which are both too far away from the subject property to result in inundation in the event of a seiche. (Google Earth Pro, 2019) The Project also is located outside of the 100-year floodplain. Accordingly, implementation of 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?

As discussed in Threshold "a" above, the Project site is located within the Santa Ana River Basin and Project-related construction and operational activities would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Plan* by preparing and adhering to a SWPPP and WQMP and by installing and maintaining BMPs. Implementation of the Project would not conflict with or obstruct the *Santa Ana River Basin Water Quality Control Plan* and impacts would be less than significant.

The Project site is located within the portion of the Riverside-Arlington Subbasin that is adjudicated under the 1969 Western-San Bernardino Judgment. Adjudicated basins, like the Riverside-Arlington Subbasin are exempt from the 2014 Sustainable Groundwater Management Act (SGMA) because such basins already operate under a court-ordered management plan to ensure the long-term sustainability of the Subbasin. No component of the Project would obstruct with or prevent implementation of the management plan for the Riverside-Arlington Subbasin. As such, the Project's construction and operation would not conflict with any sustainable groundwater management plan. Impacts would be less than significant.

4.9.5 Cumulative Impact Analysis

The cumulative impact analysis considers potential hydrology and water quality effects of the Project in conjunction with other development projects in the vicinity of the Project site as well as other projects located in the Santa Ana River Basin and the Upper Santa Ana Valley Groundwater Basin. The analysis of potential cumulative impacts to hydrology and water quality is divided into six general topics of discussion by combining the Thresholds of Significance (listed above in Subsection 4.9.3) into groupings of like topics, as follows: water quality (Thresholds "a" and "e"); groundwater supply and recharge (Threshold "b"); erosion and siltation (Threshold "c"); flood hazards (Thresholds "c"); stormwater drainage system capacity (Threshold "c"); and other hazards (Threshold "d").

A. Water Quality

Project construction and the construction of other projects in the cumulative study area would have the potential to contribute waterborne pollution, including erosion and sedimentation, to the Santa Ana River Watershed. Pursuant to the requirements of the State Water Resources Control Board and the Santa Ana RWQCB, all construction projects that disturb one (1) or more acre of land area are required to obtain a NPDES permit and obtain coverage for construction activities. In order to obtain coverage, an effective site-specific SWPPP is required to be developed and implemented. The SWPPP must identify potential on-site pollutants and identify an effective combination of erosion control and sediment control measures to reduce or eliminate discharge of pollutants to surface waters. In addition, the Project Applicant and all cumulative developments in the Santa Ana River Basin would be required to comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Program*, which establishes water quality standards for ground and surface waters of the region. Compliance with these mandatory regulatory requirements, would ensure that development projects within the Santa Ana River watershed, including the proposed Project, would not contribute substantially to water quality impairments during construction.

Operational activities on the Project site would be required to comply with the Project's Preliminary WQMP to minimize the amount of waterborne pollution discharged from the site. Other development projects within the watershed would similarly be required by law to prepare and implement site-specific WQMPs to ensure that runoff does not substantially contribute to water quality violations. Accordingly, operation of the Project would not contribute to cumulatively-considerable water quality effects.

B. Groundwater Supply and Recharge

Although the proposed Project would increase impervious surface coverage on the site, the Project incorporates permeable landscape areas and other design features that would allow some surface runoff to infiltrate into the groundwater basin. Also, as previously noted, the County is underlain by groundwater resources associated with the Upper Santa Ana Valley, Riverside-Arlington Subbasin; however, impacts to groundwater recharge would be incremental and insignificant as domestic water supplies are not reliant on groundwater as a primary source and would not adversely affect any designated groundwater recharge basin. Furthermore, no groundwater wells would be installed on the Project site as part of the Project's implementation. For these reasons, the proposed Project would not result in cumulatively-considerable impacts associated with the depletion of groundwater supplies or substantial interference with sustainable groundwater recharge.

C. Erosion and Siltation

Construction of development projects within the Santa Ana River Watershed would alter existing ground contours throughout the basin, which would result in changes to the basin's existing drainage patterns. However, these development projects, including the proposed Project, would be required to comply with federal, State, and local regulations to minimize stormwater pollution during construction (including erosion and siltation). Accordingly, grading plans would be required to be designed to preclude undue soil erosion and development projects would be required to prepare and

implement SWPPPs and WQMPs to ensure that substantial soil erosion and/or sedimentation would not occur during temporary construction conditions or long-term operating conditions. Because the Project, and all other developments throughout the Santa Ana River Watershed, would need to comply with applicable federal, State, and local regulations, substantial cumulative erosion and/or siltation would not occur.

D. Flood Hazards

Construction of the Project and other development projects within the Santa Ana River Watershed would be required to comply with federal, State, and local regulations and applicable regional and local master drainage plans in order to mitigate flood hazards both on- and off-site. Compliance with federal, State, and local regulations and applicable drainage plans would require development sites to be protected from flooding during peak storm events (i.e., 100-year storm) and also would not allow development projects to expose downstream properties to increased flooding risks during peak storm events. In addition, future development proposals within the Santa Ana River Watershed would be required to prepare hydrologic and hydraulic calculations, subject to review and approval by the responsible City/County Engineer, to demonstrate that substantial on- and/or off-site flood hazards would not occur. As discussed under the response to Threshold "c," the Project is designed to ensure that peak flood volumes and flows are less than that of existing conditions. Because the Project and all other developments throughout the Santa Ana River Basin, would need to comply with federal, State, and local regulations to ensure that stormwater discharges do not substantially exceed existing volumes or exceed the volume of available conveyance infrastructure, a substantial cumulative impact related to flood hazards would not occur.

Additionally, the Project site is not located within a special flood hazard area subject to inundation by the 1-percent annual flood (i.e., 100-year floodplain). Accordingly, development on the Project site would have no potential to impede or redirect flood flows within a 100-year floodplain and no cumulatively-considerable impact would occur.

E. Stormwater Drainage System Capacity

The Project would generate less peak runoff compared to the site's existing conditions. Runoff would be discharged to Cactus Avenue, in which storm flows are conveyed aboveground via the curb and gutter system. Because the proposed Project's contribution of flows would be less than occurs under existing conditions, the Project's contribution to stormwater conveyance capacity would thus be less than cumulatively-considerable.

F. Other Hazards

The Project site is not located within an inundation area associated with seiches, tsunamis, or flooding. The Project has no potential – on either a direct or cumulative level – to result in adverse water quality effects due to inundation.

4.9.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project would not violate any water quality standards or waste discharge requirements on a direct or cumulatively-considerable basis. Compliance with a SWPPP and WQMP is required to address construction-related water quality issues.

Threshold b: Less-than-Significant Impact. The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

Threshold c: Less-than-Significant Impact. The Project would retain the site's general drainage pattern and is required to incorporate design features to minimize erosion and sediment within surface water runoff. The Project would not create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems, nor would development of the Project provide substantial additional sources of polluted runoff. The Project also would not construct structures within a 100-year flood hazard area that would impede or redirect flood flows.

Threshold d: No Impact. The Project would not be subject to seiches, tsunamis, or flood hazards; therefore, risk release of pollutants due to Project inundation would not occur.

Threshold e: Less-than-Significant Impact. The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.9.7 Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

4.10 LAND USE AND PLANNING

This Subsection discusses the Project's consistency with applicable land use and planning policies adopted by the County of San Bernardino and other governing agencies for the purpose of reducing adverse effects on the environment. Information used to support the analysis in this Subsection was obtained primarily from the San Bernardino County General Plan (County of San Bernardino, 2014), Southern California Association of Governments (SCAG) *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* (SCAG, 2016), and the San Bernardino County Greenhouse Gas Emissions Reduction Plan (County of San Bernardino, 2011) Refer to Section 7.0, *References*, for a complete list of reference sources.

4.10.1 EXISTING CONDITIONS

A. Existing Land Use and Development

Under existing conditions, the Project site is mostly vacant with the exception of four (4) single-family residences: two (2) on the western portion, one (1) at the southeastern corner and one (1) on the northeastern portion of the site (refer to Figure 2-3, *Aerial Photograph*).

The Project site is located at the interface between industrial and other employment uses to the east (business park, distribution warehousing, e-commerce, and light industrial) and residential and commercial uses to the north, west, and south (as previously shown on Figure 2-1, *Surrounding Land Uses and Development*). The Project site is bound by Slover Avenue to the north. The Union Pacific Railroad's West Colton Yard – a classification yard that operates 24 hours per day, 7 days per week and handles 17 trains and 1,436 railroad cars daily – is located immediately north of Slover Avenue. The I-10 Freeway is located immediately north of the West Colton Yard. Industrial land uses are located to the northwest of the Project site (north of Slover Avenue and west of the West Colton Yard), primarily consisting of construction equipment and materials storage yards and associated office buildings. Single-family residences are located immediately south of the Project site. Several of the residential properties located south of the Project site contain multiple outbuildings and appear to support animal keeping while others provide parking for trucks and appear to support independent trucking businesses. The properties located immediately west of the Project site are utilized as the Peña Plant Nursery, which grows ornamental plants in above-ground containers. Single-family residences are located immediately west of the Peña Plant Nursery. Spruce Avenue and single-family residences are located farther west of the Project site. A plot of vacant undeveloped land abuts the southwest corner of the Project site. The Project site is bound by Cactus Avenue on the east. A mix of single-family residences and industrial land uses (including a SC Fuels petroleum products distribution yard) are located east of Cactus Avenue. A Flyers Energy petroleum products warehouse and distribution yard and a food processing plant operated by Biscomerica Corporation is located farther to the east, south of Slover Avenue and west of Lilac Avenue. A vacant undeveloped property is located immediately southeast of the Project site across Cactus Avenue. The properties located east Cactus Avenue are located within the City of Rialto.

4.10.2 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of the federal, State, and local environmental laws and related regulations related to land use and planning.

A. State Plans, Policies, and Regulations

1. California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§ 65000 - 66210. Under State of California planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the Government Code, including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures.

2. Office of Planning and Research (OPR) General Plan Guidelines

Each city and county in California must prepare a comprehensive, long term general plan to guide its future. To assist local governments in meeting this responsibility, the Governor's Office of Planning and Research (OPR) is required to adopt and periodically revise guidelines for the preparation and content of local general plans pursuant to Government Code § 65040.2. The General Plan Guidelines is advisory, not mandatory. Nevertheless, it is the State's only official document explaining California's legal requirements for general plans. Planners, decision-making bodies, and the public depend upon the General Plan Guidelines for help when preparing local general plans. The courts have periodically referred to the General Plan Guidelines for assistance in determining compliance with planning law. For this reason, the General Plan Guidelines closely adheres to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice. (OPR, 2017)

B. Local Plans, Policies, and Regulations

1. San Bernardino County General Plan

The County of San Bernardino General Plan (2007) is a policy document that reflects the County's vision for the future of San Bernardino. The General Plan is organized into eight (8) separate elements, which contain a series of policies to guide the County's vision for future development. Each of the elements from the County of San Bernardino General Plan are summarized below.

- **Land Use Element**

The Land Use Element functions as a guide for the County of San Bernardino's future development. It designates the distribution and general location of land uses, such as residential, retail, industrial, open space, recreation, and public areas. The Land Use Element also addresses the permitted density

and intensity of the various land use designations as reflected on the County's General Plan Land Use Diagram. (SB County, 2016, Section 82.07.010)

The County's General Plan designates the Project site for "Single Residential" (RS-1) land uses. The RS-1 land use designation is intended to provide areas for single-family homes on individual lots. The maximum permitted density for the RS-1 land use designation is 1 dwelling unit per acre (du/ac) (County of San Bernardino, 2014, Table LU-1). Additionally, an Additional Agriculture (AA) Overlay applies to the Project site. According to County's Development Code, the purpose of the AA Overlay is to "create, preserve, and improve areas for small-scale and medium-scale agricultural uses utilizing productive agricultural lands for raising, some processing, and the sale of plant crops, animals, or their primary products. It is an overlay where agricultural uses exist compatibly with a variety of rural residential lifestyles." (SB County, 2016, Section 82.07.010)

❑ Circulation and Infrastructure Element

The Circulation and Infrastructure Element lays the groundwork for and promotes the development of a coordinated, multi-modal countrywide transportation system and infrastructure capacity to meet the needs of all people living, working, or visiting the County and all economic segments of the community. The purpose of the Circulation and Infrastructure Element is to set forth strategies to support the production of a circulation and infrastructure system consistent with the overall vision specified for the County. (County of San Bernardino, 2014, p. III-1)

❑ Housing Element

The purpose of the Housing Element is to set forth planning strategies to support the production of housing consistent with the vision specified for the County. The Housing Element promotes the development of a wide variety of housing to meet the needs of all economic segments of the community. The Housing Element is the one element of the San Bernardino County General Plan that is adopted as a stand-alone document in addition to being part of the General Plan. The County's Housing Element identifies programs and resources required for the preservation, improvement, and development of housing to meet the existing and projected needs of its population. (County of San Bernardino, 2014, p. IV-1)

❑ Conservation Element

The Conservation Element provides direction regarding the conservation, development, and utilization of the County of San Bernardino's natural resources. Its objective is to prevent the wasteful exploitation, destruction, and neglect of resources. The Conservation Element is distinguished by being primarily oriented toward natural resources. One role of the Conservation Element is to establish policies that reconcile conflicting demands on those resources. The Conservation Element involves both identification of a community's natural resources and adoption of policies for their preservation, development, and wise use. (County of San Bernardino, 2014, p. V-1)

❑ Open Space Element

The Open Space Element provides a reference to guide the protection and preservation of open space, recreation, and scenic areas, while accommodating future growth within the County (County of San Bernardino, 2014, p. VI-1).

❑ Noise Element

The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must "analyze and quantify" noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that "minimizes the exposure of community residents to excessive noise." Noise-level contours must be mapped, and the conclusions of the element used as a basis for land use decisions. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities because these are common sources of excessive noise levels. The Noise Background Report provides much of these technical data, and includes generalized estimates of distances to noise contours for typical traffic volumes on County roadways. The most common sources of environmental noise in San Bernardino County are associated with roads, airports, railroad operations, and industrial activities. The facilities are used to transport residents, consumer products and provide basic infrastructure for the community by creating jobs and economic stability. In many areas of the County, noise-sensitive land uses such as residences, schools, churches, and parks exist in proximity to these major noise sources. (County of San Bernardino, 2014, p. VII-1)

❑ Safety Element

The purpose of the Safety Element is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, earthquakes, landslides, and other hazards. The Safety Element must identify hazards and hazard abatement provisions to guide local decisions related to zoning, subdivisions, and entitlement permits. The Safety Element should contain general hazard and risk reduction strategies and policies to minimize potential dangers to residents, workers, and visitors; reduce the level of property loss resulting from a potential disaster; and, identify ways to respond to a crisis situation. (County of San Bernardino, 2014, p. VIII-1)

❑ Economic Development Element

The rationale for adopting an Economic Development Element is based upon a desire to maintain and enhance the economic character of the community while providing for a stable annual budget. The Economic Development Element is intended to guide the County in expanding the local economy, which provides jobs, attracts and retains businesses, supports diverse and vibrant commercial areas, and brings in sufficient revenue to support various local programs and services. Because the Economic Development Element is not a state mandated element, the state has not set forth requirements for the element. However, the state has provided a list of suggested issues which the Economic Development Element can address including business retention and development by

sector; employment development, business recruitment, fiscal stability, and budgetary structure. (County of San Bernardino, 2014, p. IX-1)

2. San Bernardino County Regional Greenhouse Gas Reduction Plan

The County of San Bernardino adopted a Greenhouse Gas Reduction Plan in September 2011, which provides guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects located within the unincorporated communities of San Bernardino County. The Greenhouse Gas Reduction Plan includes a GHG Development Review Process (DRP) that specifies a two-step approach in quantifying GHG emissions. First, a screening threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year is used to determine if additional analysis is required. If a proposed project were to produce GHG emissions in exceedance of 3,000 $MTCO_2e$ per year, then the project is required to either achieve a minimum of 100 points per the Screening Tables provided within the Greenhouse Gas Reduction Plan or achieve a 31% reduction in $MTCO_2e$ emissions over 2007 emissions levels. In accordance with the Greenhouse Gas Reduction Plan, if a development project were to emit less than 3,000 $MTCO_2e$ per year, or reach the 100-point minimum score on the screening table, or reduce emissions by 31% from 2007 emissions, the project would be determined to have a less than significant impact for GHG emissions. (County of San Bernardino, 2011, pp. 4-5)

3. SCAG Regional Transportation Plan and 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. SCAG develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and other plans for the region. (SCAG, 2016)

As a MPO and public agency, SCAG develops transportation and housing strategies that transcend jurisdictional boundaries that affect the quality of life for southern California as a whole. SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. The *RTP/SCS* also provides objectives for meeting emissions reduction targets set forth by the California Air Resources Board (ARB); 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. (SCAG, 2016)

4. SCAQMD Air Quality Management Plan

An AQMP is a plan for the regional improvement of air quality. The South Coast Air Quality Management District's (SCAQMD's) *2016 AQMP* is the most recent AQMP for the South Coast Air Basin and was approved by the SCAQMD Governing Board in March 2017. (SCAQMD, 2017) The Project's consistency with the *2016 AQMP* was analyzed in detail in EIR Subsection 4.2, *Air Quality*.

5. San Bernardino County Congestion Management Program

The *San Bernardino County Congestion Management Program (CMP)* was prepared by the San Bernardino Associated Governments (SANBAG). The intent of the *CMP* is to more directly link land use, transportation, and air quality planning and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds to alleviate traffic congestion and related impacts and improve air quality. The *San Bernardino CMP* was first adopted in November 1992 and has since been updated 12 times, with the most recent comprehensive update in June 2016. The proposed Project's consistency with the *CMP* is discussed in detail in EIR Subsection 4.12, *Transportation*.

4.10.3 Basis for Determining Significance

The proposed Project would result in a significant impact related to land use and planning if the Project or any Project-related component would:

a. Physically divide an established community; or

b. 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 above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects that development projects could have on the physical environment due to a land use and planning conflict.

4.10.4 Impact Analysis

Threshold a: Would the Project physically divide an established community?

Under existing conditions, the Project site is separated by Slover Avenue to the north, a nursery and single-family residences to the west, Cactus Avenue to the east, and single-family residences to the south. Several of the residential properties located south of the Project site contain multiple outbuildings and appear to support animal keeping while others provide parking for trucks and appear to support independent trucking businesses. Thus, the Project site is either surrounded by roadways or mixed residential and industrial commercial development. Because the Project site is already physically separated from neighboring properties under existing conditions, development of the Project site as a warehouse facility would not physically divide any existing, surrounding community.

Threshold b: ***Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

A. County of San Bernardino General Plan

The land use proposed by the Project Applicant – a warehouse facility – is not consistent with the existing County of San Bernardino General Plan Map, which designates the Project site for "Single Residential, one-acre minimum lot size, with Additional Agricultural Overlay (RS-1-AA)" land uses. However, the Project includes an amendment to the County of San Bernardino General Plan Map that would change the Project site's land use designation to "Community Industrial (IC)" and, if approved, would eliminate the Project's inconsistency with the General Plan Map. The environmental impacts that would result from the Project's inconsistency with the existing County of San Bernardino General Plan Map are disclosed throughout this EIR. Where significant environmental effects are identified, mitigation is provided in the applicable subsection of this EIR to reduce the Project's effects to less-than-significant levels (or, if it is not possible to reduce the Project's impacts to less-than-significant levels, mitigation is provided that has a proportional nexus to the Project's impacts to minimize impacts to the maximum level feasible). There are no other potentially significant environmental impacts specifically associated with the Project's land use inconsistency with the existing San Bernardino General Plan Map that have not already been addressed in other portions of this EIR and, therefore, additional mitigation measures beyond those identified throughout this EIR would not be required. Further, if the Project is approved, the Project will not be inconsistent with the County of San Bernardino General Plan because the aforementioned General Plan Amendment is a component of the Project proposal.

Further, the Project would not conflict with any specific objectives, policies, or actions in the General Plan's Land Use, Circulation and Infrastructure, Housing, Conservation, Open Space, Noise, Safety, or Economic Development elements that were adopted for the purpose of avoiding or mitigating an environmental effect.

B. SCAG Regional Transportation Plan and Sustainable Communities Strategy

As shown in Table 4.10-1, *SCAG RTP/SCS Goal Consistency Analysis*, the Project would not conflict with the adopted RTP/SCS. Thus, impacts would be less than significant.

Table 4.10-1 SCAG RTP/SCS Goal Consistency Analysis

RTP/SCS Goals	Goal Statement	Project Consistency Discussion
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning efforts.

Table 4.10-1 SCAG RTP/SCS Goal Consistency Analysis

RTP/SCS Goals	Goal Statement	Project Consistency Discussion
G2	Maximize mobility and accessibility for all people and goods in the region.	Consistent. EIR Subsection 4.12, *Transportation*, evaluates Project-related traffic impacts and specifies mitigation measures to ensure that roadway and intersection and intersection improvements needed to accommodate Project traffic volumes are implemented concurrent with proposed development.
G3	Ensure travel safety and reliability for all people and goods in the region.	Consistent. As disclosed in EIR Subsection 4.12 there are no components of the proposed Project that would result in a substantial safety hazards to motorists.
G4	Preserve and ensure a sustainable regional transportation system.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would have no adverse effect on such planning or maintenance efforts.
G5	Maximize the productivity of our transportation system.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project would not conflict with the County of San Bernardino's General Plan Circulation and Infrastructure Element, which meets this goal to maximize productivity.
G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	Consistent. An analysis of the Project's environmental impacts is provided throughout this EIR, and mitigation measures are specified where warranted. Air quality is addressed in EIR Subsection 4.2, *Air Quality*, and mitigation measures are specified to reduce the Project's air quality impacts to the maximum feasible extent. Additionally, and as discussed in EIR Subsections 4.7, *Greenhouse Gas Emissions*, and 4.5, *Energy*, the Project would foreseeably incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy.
G7	Actively encourage and create incentives for energy efficiency, where possible.	Consistent. This policy provides guidance to County staff to establish local incentive programs to encourage and promote energy efficient development. EIR Subsection 4.5, *Energy*, discusses the Project's foreseeable design features related to building design, landscaping, and energy systems to promote the efficient use of energy.

Table 4.10-1 SCAG RTP/SCS Goal Consistency Analysis

RTP/SCS Goals	Goal Statement	Project Consistency Discussion
G8	Encourage land use and growth patterns that facilitate transit and active transportation.	No conflict identified. This policy provides guidance to the County to establish a local land use plan that facilitates the use of transit and non-motorized forms of transportation. The Project would develop the subject property with an employment-generating land use (i.e., warehouse facility) that would provide local job opportunities to existing and future residents of the County that would be accessible with active transportation.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	No conflict identified. This policy provides guidance to the County of San Bernardino to monitor the transportation network and to coordinate with other agencies as appropriate.

Source: (SCAG, 2016)

C. *San Bernardino County Regional Greenhouse Gas Reduction Plan*

The Project's consistency with the San Bernardino County Regional Greenhouse Gas Reduction Plan was addressed in detail in EIR Subsection 4.7, *Greenhouse Gas Emissions* (refer to the analysis presented on Page 4.7-15). As concluded in EIR Subsection 4.7, the Project would not conflict with the County of San Bernardino Regional Greenhouse Gas Reduction Plan.

D. *SCAQMD Air Quality Management Plan (AQMP)*

The Project's consistency with the SCAQMD *2016 AQMP* was addressed in detail in EIR Subsection 4.2, *Air Quality* (refer to the analysis presented on Pages 4.3-20 and 4.3-21). As concluded in EIR Subsection 4.2, the Project would exceed the SCAQMD localized emissions threshold for fine particulate matter ($PM_{2.5}$), and by extension, would result in violations of the NAAQS and/or CAAQS contained in the SCAQMD *2016 AQMP* and, thus, the Project results in air pollutant emissions that are inconsistent with the projections in the *AQMP*. Mitigation is provided in EIR Subsection 4.2 to reduce the Project's air pollutant emissions to the maximum level feasible. The Project would not result in any other conflicts with the *2016 AQMP* that were not already disclosed in EIR Subsection 4.2. No feasible mitigation measures beyond those identified in EIR Subsection 4.2 are available to reduce this impact to a level of insignificance.

E. *San Bernardino County Congestion Management Program*

The Project's consistency with the *San Bernardino County CMP* is addressed in EIR Subsection 4.12, *Transportation*. As concluded in EIR Subsection 4.12, the Project would not cause or contribute to significant impacts at any *San Bernardino County CMP* arterial roadway network facility or freeway facility. Therefore, the Project would not result in a substantial environmental

impact due to conflict with the *San Bernardino County CMP* LOS standards for the *CMP* arterial roadway and freeway network. Impacts would be less than significant.

4.10.5 Cumulative Impact Analysis

Under existing conditions, the Project site is physically separated from neighboring land uses by existing roadways or mixed residential and industrial commercial development. Because the Project site does not directly abut any established land uses, there is no potential for the Project to cause or cumulatively contribute to the division of an established community.

Amendments to the County of San Bernardino General Plan land use designation applied to the Project site would permit development of an industrial warehouse facility. The proposed use of the Project site for industrial land uses – as opposed to a single residential land use as currently planned because at the time the General Plan was adopted, the Project site was owned by the County of San Bernardino – would indirectly result in significant environmental impacts, including impacts related to air quality and traffic, that conflict with plans that were adopted to minimize/avoid adverse environmental impacts. As development occurs elsewhere throughout the cities of Chino, Ontario, and the larger Inland Empire area, any proposal to change the underlying land use or development intensity for a specific property would similarly have the potential to result to conflict with applicable land plans and result in substantial, adverse environmental effects. The Project's contribution to cumulative environmental effects resulting from conflicts with applicable plans would be considerable.

4.10.6 Significance of Impacts Before Mitigation

Threshold a: No Impact. The proposed Project would not physically divide an established community.

Threshold b: Less than Significant Impact. The Project's proposed General Plan Amendment would eliminate inconsistencies between the land use proposed for the Project site and the site's existing General Plan land use designation. The Project would not result in significant land use and planning conflicts in the context of compliance with applicable environmental plans, policies, and regulations beyond those identified in other Subsections of this EIR.

4.10.7 Mitigation

Refer to all mitigation measures presented in this EIR. In instances where significant impacts are identified as part of the Project's construction and/or operational phases, mitigation measures are provided in the specific topic sections to reduce impacts to less-than-significant levels (or, if it is not possible to reduce the Project's impacts to less-than-significant levels, mitigation is provided to minimize impacts to the maximum level feasible).

4.11 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 technical report prepared by Urban Crossroads, Inc., dated May 17, 2019, and titled "Slover and Cactus Warehouse Noise Impact Analysis" (Urban Crossroads, 2019f). The report is included as *Technical Appendix J* to this EIR. Refer to Section 7.0, *References*, for a complete list of reference sources.

4.11.1 NOISE FUNDAMENTALS

A. Noise Definitions

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes physical harm, or when it has adverse effects on health. Because the range of sound that the human ear can detect is large, the scale used to measure sound intensity is based on multiples of 10, the logarithmic scale. The unit of measure to describe sound intensity is the decibel (dB). Each interval of 10 dB indicates a sound energy 10 times greater than before and is perceived by the human ear as being roughly twice as loud. A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum (i.e., frequencies that are not audible to the human ear). The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at a distance of three feet is roughly 60 dBA, while a jet engine is 110 dBA at approximately 100 feet. (Urban Crossroads, 2019f, pp. 11-12)

B. Noise Descriptors

Environmental noise descriptors are generally based on averages, rather than instantaneous noise levels. The most commonly used figure is the equivalent continuous noise level (L_{eq}). L_{eq} represents a steady state sound level containing the same total energy as a time varying signal over a given time period. L_{eq} are not measured directly but are calculated from sound pressure levels typically measured in dBA. Consequently, L_{eq} can vary depending on the time of day. (Urban Crossroads, 2019f, p. 12)

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour levels 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 five (5) dB to sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 dB to 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 nighttime hours when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound

exposure. The County of San Bernardino relies on the 24-hour CNEL level to assess land use compatibility with transportation-related noise sources. (Urban Crossroads, 2019f, p. 12)

C. Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on geometric spreading, ground absorption, atmospheric effects, and shielding. (Urban Crossroads, 2019f, p. 12)

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. (Urban Crossroads, 2019f, p. 12)

2. Ground Absorption Noise

To account for the ground-effect attenuation (absorption) of noise, two types of site conditions are commonly used in noise models: soft site and hard site conditions. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., sites with an absorptive ground surface between the source and the receptor 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. (Urban Crossroads, 2019f, pp. 12-13)

3. Atmospheric Impacts

Receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Other factors that may affect noise levels include air temperature, humidity, and turbulence. (Urban Crossroads, 2019f, p. 13)

4. Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Solid objects or barriers are most effective at attenuating noise levels. Effective noise barriers can reduce noise levels by 10 to 15 dBA. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (Urban Crossroads, 2019f, p. 13)

D. Response to Noise

Approximately 10% of the population has a very low tolerance for noise and will object to any noise not of their own making. Consequently, even in the quietest environment, some complaints will occur. Another 25% 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 environment. Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels: an increase of 1 dBA cannot be perceived except in carefully controlled laboratory experiments; a change of 3 dBA is considered "barely perceptible;" and a change of 5 dBA is considered "readily perceptible." (Urban Crossroads, 2019f, p. 14)

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. (Urban Crossroads, 2019f, pp. 15-16)

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne 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. (Urban Crossroads, 2019f, p. 16)

4.11.2 Existing Noise Conditions

A. Existing Study Area Ambient Noise Conditions

Urban Crossroads recorded 24-hour noise readings at seven (7) locations near the Project site on May 9, 2018. The noise measurement locations are identified in Figure 4.11-1, *Noise Measurement Locations*. The existing ambient noise levels in the vicinity of the Project site are dominated by traffic noise associated with automobiles and truck traffic on the local arterial roadway network and noise from activity at the nearby Union Pacific railroad yard. (Urban Crossroads, 2019f, pp. 31, 33)

The results of the existing noise level measurements are listed in Table 4.11-1, *Existing 24-Hour Ambient Noise Level Measurements*, and summarized below. Refer to Appendix 5.2 of *Technical Appendix J* 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.

Table 4.11-1 Existing 24-Hour Ambient Noise Level Measurements

Location[1]	Distance to Project Boundary (Feet)	Description	Energy Average Hourly Noise Level (dBA L_{eq})[2]		CNEL
			Daytime	Nighttime	
L1	80'	Located east of the Project site across Cactus Avenue, near existing industrial uses and a residential home.	61.6	59.0	66.2
L2	475'	Located south of the Project site, near existing residential homes on Cactus Avenue.	68.3	64.8	72.1
L3	1,070'	Located south of the Project site on Cactus Avenue, near existing residential homes.	64.4	61.3	68.5
L4	1,000'	Located south of the Project site on Spruce Avenue, near existing residential homes.	63.1	60.5	67.7
L5	375'	Located west of the Project site on Spruce Avenue, near existing residential homes.	55.8	53.6	60.9
L6	1,730'	Located on Slover Avenue south of Slover High School, west of the Project site.	71.4	68.3	75.6
L7	160'	Located north of the Project site, adjacent to an existing railroad yard.	65.1	61.1	68.8

[1]See Exhibit 5-A for the noise level measurement locations.
[2]Energy (logarithmic) average hourly levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.
Source: (Urban Crossroads, 2019f, Table 5-1)

- Location L1 represents the noise levels east of the Project site (east of Cactus Avenue) near existing industrial uses and a residential home. The noise level measurements collected show an overall 24-hour exterior noise level of 66.2 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 61.6 dBA Leq with an average nighttime noise level of 59.0 dBA Leq. (Urban Crossroads, 2019f, p. 32)
- Location L2 represents the noise levels south of the Project site near existing residential homes on Cactus Avenue. The noise level measurements collected show an overall 24-hour exterior noise level of 72.1 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 68.3 dBA Leq with an average nighttime noise level of 64.8 dBA Leq. (Urban Crossroads, 2019f, p. 32)
- Location L3 represents the noise levels south of the Project site on Cactus Avenue near existing residential homes. The 24-hour CNEL indicates that the overall exterior noise level is 68.5 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.4 dBA Leq with an average nighttime noise level of 61.3 dBA Leq. (Urban Crossroads, 2019f, p. 32)

Source(s): Urban Crossroads (05-17-2019)

Figure 4.11-1

Not to Scale

Noise Measurement Locations

- Location L4 represents the noise levels south of the Project site on Spruce Avenue near existing residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 67.7 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 63.1 dBA Leq with an average nighttime noise level of 60.5 dBA Leq. (Urban Crossroads, 2019f, p. 32)
- Location L5 represents the noise levels west of the Project site on Spruce Avenue near existing residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 60.9 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 55.8 dBA Leq with an average nighttime noise level of 53.6 dBA Leq. (Urban Crossroads, 2019f, p. 32)
- Location L6 represents the noise levels on Slover Avenue south of Slover High School, west of the Project site. The noise level measurements collected show an overall 24-hour exterior noise level of 75.6 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 71.4 dBA Leq with an average nighttime noise level of 68.3 dBA Leq. (Urban Crossroads, 2019f, p. 32)
- Location L7 represents the noise levels north of the Project site adjacent to an existing railroad yard. The 24-hour CNEL indicates that the overall exterior noise level is 68.8 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 65.1 dBA Leq with an average nighttime noise level of 61.1 dBA Leq. (Urban Crossroads, 2019f, p. 32)

B. Existing Groundborne Vibration

There are no sources of perceptible groundborne vibration on the Project site under existing conditions.

C. Airport Noise

The Project site is located approximately 11.4 miles east of the International Ontario Airport (ONT). The Project site is located within the ONT airport influence area (AIA) but is not located within a Noise Impact Zone for the ONT. (City of Ontario, 2010, Policy Maps 2-1 and 2-3)

4.11.3 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of the federal, State, and local environmental laws and regulations related to noise that are applicable to the Project, the Project site, and/or the surrounding area.

A. Federal Plans, Policies, and 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, 2017e)

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, 2017e)

2. Federal Transit Administration

The Federal Transit Administration (FTA) 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 manual is used by project sponsors and consultants in performing noise and vibration analyses for inclusion in environmental documents. The manual 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)

3. 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, 2017)

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 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, 2017)

4. 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)

B. State Plans, Policies, and Regulations

1. State of California Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city in the State of California adopt a General Plan that includes a Noise Element, which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

2. Building Standards Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Standards Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

3. OPR General Plan Guidelines

Though not adopted by law, the 2017 California General Plan Guidelines, published by the California Governor's Office of Planning and Research (OPR), provides guidance for local agencies in preparing or updating General Plans. The Guidelines provide direction on the required Noise Element portion of the General Plans. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. Local governments must "analyze and quantify" noise levels and the extent of noise exposure through actual measurement or the use of noise modeling. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that "minimizes the exposure of community residents to excessive noise." Noise level contours must be mapped and the conclusions of the element used as a

basis for land use decisions. The element must include implementation measures and possible solutions to existing and foreseeable noise problems. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The Noise Element directly correlates to the Land Use, Circulation, and Housing Elements. The Noise Element must be used to guide decisions concerning land use and the location of new roads and transit facilities since these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agricultural, and industrial activities, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses. (OPR, 2017, pp. 131-132)

C. *Local Plans, Policies, and Regulations*

1. *County of San Bernardino General Plan*

The County of San Bernardino General Plan Noise Element addresses the control and abatement of noise and specifies the maximum allowable exterior noise levels for developments that would be impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads.

2. *County of San Bernardino Development Code*

❑ Noise Standards

Section 83.01.080 of the County of San Bernardino Development Code establishes the County's acceptable noise levels for noise-sensitive and noise-generating land uses. The County of San Bernardino Development Code does not identify a maximum noise limit for construction noise; but does establish standards for stationary noise and mobile source noise.

The County's standards for stationary noise are included in Development Code Section 83.01.080(c) and are summarized in Table 4.11-2.

Table 4.11-2 County of San Bernardino Noise Standards for Stationary Noise Sources

Affected Land Uses (Receiving Noise)	7 am-10 pm Leq	10 pm-7 am Leq
Residential	55 dB(A)	45 dB(A)
Professional Services	55 dB(A)	55 dB(A)
Other Commercial	60 dB(A)	60 dB(A)
Industrial	70 dB(A)	70 dB(A)
Leq = (Equivalent Energy Level). The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period, typically 1, 8 or 24 hours.		
dB(A) = (A-weighted Sound Pressure Level). The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.		
Ldn = (Day-Night Noise Level). The average equivalent A-weighted sound level during a 24-hour day obtained by adding 10 decibels to the hourly noise levels measured during the night (from 10 pm to 7 am). In this way Ldn takes into account the lower tolerance of people for noise during nighttime periods.		

It should be noted that Table 4.11-2 establishes stationary noise standards for average noise energy (dBA L_{eq}). Development Code Section 83.01.080(c)(2) allows noise levels that exceed those in Table 4.11-2 over short periods of time, as summarized below:

- The noise standard for the receiving land use specified in Table 4.11-2 for a cumulative period of no more than 30 minutes in an hour (L_{50});
- The noise standard for the receiving land use specified in Table 4.11-2 plus 5 dBA for a cumulative period of no more than fifteen minutes in an hour (L_{25});
- The noise standard for the receiving land use specified in Table 4.11-2 plus 10 dBA for a cumulative period of no more than five minutes in an hour (L_8);
- The noise standard for the receiving land use specified in Table 4.11-2 plus 15 dBA for a cumulative period of more than one minute in an hour (L_2); and /or
- The noise standard for the receiving land use specified in Table 4.11-2 plus 20 dBA for any period of time.

The County's standards for stationary noise are included in Development Code Section 83.01.080(d) and are summarized in Table 4.11-3.

Table 4.11-3 County of San Bernardino Noise Standards for Mobile Noise Sources

Land Use		Ldn (or CNEL) dB(A)	
Categories	Uses	Interior (1)	Exterior (2)
Residential	Single and multi-family, duplex, mobile homes	45	60 (3)
Commercial	Hotel, motel, transient housing	45	60 (3)
	Commercial retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	N/A
Institutional/Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65

Notes:
(1) The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.
(2) The outdoor environment shall be limited to:
- Hospital/office building patios
- Hotel and motel recreation areas
- Mobile home parks
- Multi-family private patios or balconies
- Park picnic areas
- Private yard of single-family dwellings
- School playgrounds

(3) An exterior noise level of up to 65 dB(A) (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.

CNEL = (Community Noise Equivalent Level). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and 10 decibels to sound levels in the night from 10 p.m. to 7 a.m.

❑ **Vibration Standards**

The County of San Bernardino Municipal Code Section 83.01.090(a) states that vibration shall be no greater than or equal to 0.2 inches per second (in/sec) peak particle velocity (PPV) at or beyond the lot line.

4.11.4 Basis for Determining Significance

The proposed Project would result in a significant noise impact if the Project or any Project-related component would result in:

a. 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. Generation of excessive groundborne vibration or groundborne noise levels; or

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 two miles of a public airport r public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse noise-related effects that could result from development projects. The specific, quantitative criteria described below are utilized to evaluate the significance of potential noise impacts under Thresholds "a" and "b," and are based on applicable County of San Bernardino regulations, City of Rialto regulations, and relevant federal and State performance standards.

In relation to Threshold "a," the County of San Bernardino Development Code does not identify a maximum noise limit for construction noise and, therefore, does not allow a quantified determination of potential noise impacts under CEQA. Furthermore, the Development Code does not define the levels at which a development project's temporary noise increases are considered substantial. Under Threshold "a," CEQA requires that consideration be given to the to the magnitude of the increase, the existing ambient noise levels, and the location of sensitive receptors in order to determine if a noise increase represents a substantial increase and thus a significant adverse environmental impact. Accordingly, for purposes of this EIR, the construction noise standard from the National Institute for Occupational Safety and Health (NIOSH) and the construction noise exposure criteria from the California Department of Transportation (Caltrans) are used to determine if Project construction will result in a substantial temporary noise impact. Refer to Subsections 3.4.3 and 4.1.2 of EIR *Technical Appendix J* for a detailed discussion of the NIOSH and Caltrans standards. The Project would result in a significant temporary noise impact if the Project's construction activities result in:

- Noise levels that exceed 85 dBA L_{eq} at a noise-sensitive receiver location; or
- An increase in ambient noise levels of 12 dBA L_{eq} or more at a noise-sensitive receiver location.

In relation to Threshold "a," the County of San Bernardino Development Code (Section 83.01.080) is the only relevant, established noise standards for the Project's study area; however, the Development Code does not define the levels at which a development project's permanent noise increases are considered substantial. Under Threshold "a," CEQA requires that consideration be given to the to the magnitude of the increase, the existing ambient noise levels, and the location of sensitive receptors in order to determine if a noise increase represents a substantial increase and thus a significant adverse environmental impact. For purposes of this EIR, the metric used to evaluate the significance of the Project's increase in ambient noise levels is adapted from the noise exposure criteria established by the Federal Interagency Committee on Noise (FICON). A detailed discussion of the FICON noise exposure criteria is provided in Subsection 4.1.1 of EIR *Technical Appendix J*. Accordingly, in consideration of the County of San Bernardino Development Code and the FICON noise exposure criteria, the Project would result in a significant noise impact during operation if any of the following conditions occur:

- Off-site Project-related traffic exposes noise-sensitive receptors to:
  - A 5 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise level is less than 60 dBA CNEL *and* the additional noise causes ambient noise levels to exceed 60 dBA CNEL;
  - A 3 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise level is between 60.1 and 65 dBA CNEL; or
  - A 1.5 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise levels exceeds 65.1 dBA CNEL.
- Off-site Project-related traffic exposes non-noise-sensitive receptors to:
  - A 5 dBA or greater noise level increase at non-noise-sensitive receptors when the existing ambient noise level is less than 65 dBA CNEL *and* the additional noise causes ambient noise levels to exceed 65 dBA CNEL; or
  - A 3 dBA or greater noise level increase at non-noise-sensitive receptors when the existing ambient noise level exceeds 65 dBA CNEL.
- On-site Project operations expose noise-sensitive receptors to:
  - Noise levels that exceed 55 dBA L_{eq}, 55 dBA L_{50}, 60 dBA L_{25}, 65 dBA L_8, 70 dBA L_2, and/or 75 dBA L_{MAX} during daytime hours (7:00am to 10:00 pm);
  - Noise levels that exceed 45 dBA L_{eq}, 45 dBA L_{50}, 50 dBA L_{25}, 55 dBA L_8, 60 dBA L_2, and/or 65 dBA L_{MAX} during nighttime hours (10:00 pm to 7:00am);
  - A 5 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise level is less than 60 dBA CNEL *and* the additional noise causes ambient noise levels to exceed 60 dBA CNEL;
  - A 3 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise level is between 60.1 and 65 dBA CNEL; or
  - A 1.5 dBA or greater noise level increase at noise-sensitive receptors when the existing ambient noise levels exceeds 65.1 dBA CNEL.

- On-site Project operations expose non-noise-sensitive receptors to:
  - Exposure of non-noise-sensitive receivers to 70 dBA L_{eq}, 70 dBA L_{50}, 75 dBA L_{25}, 80 dBA L_8, 85 dBA L_2, and/or 90 dBA L_{MAX} during at any point during the day;

The County of San Bernardino Development Code (Section 83.01.090(a)) establishes vibration limits for activities on property in the County. For evaluation under Threshold "b," vibration levels are considered significant if Project-related activities would:

- Create or cause to be created any vibration activity that would exceed 0.2 in/sec PPV at a noise-sensitive receptor land use.

4.11.5 Methodology for Calculating Project-Related Noise Impacts

A. Construction Noise Analysis Methodology

For the construction noise analysis, Urban Crossroads relied on reference noise level measurements that they had previously collected at construction sites throughout southern California. The reference noise level measurements included the types of construction equipment that would be used on the Project site performing similar types of construction activities at a similar level of activity as is expected to occur on the Project site. Table 4.11-4, *Construction Reference Noise Levels*, provides a summary of the reference noise level measurements. Because the reference noise measurements were collected at varying distances, all construction noise level measurements presented in Table 4.11-4 were normalized by Urban Crossroads to describe a common reference distance of 50 feet. (Urban Crossroads, 2019f, pp. 59-60)

The construction noise analysis evaluates Project-related construction noise levels at the nearby sensitive receiver locations in the Project study area. This analysis of construction-related noise does not evaluate the noise exposure of construction workers within the Project site based on CEQA's requirements to evaluate impacts to the existing environment; CEQA does not require an evaluation of the Project's impacts upon itself. During construction activities, periodic exposure to high noise levels in short duration, such as would occur during the Project's 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. Transportation-Related Noise Analysis Methodology

Transportation-related noise impacts were projected using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model FHWA-RD-77-108 (the "FHWA Model"). 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 REMELs to account for: 1) roadway classification (e.g., collector, secondary, major or arterial), 2) roadway travel width (i.e., the distance between the center of the outermost

Table 4.11-4 Construction Reference Noise Levels

ID	Noise Source	Reference Distance from Source (Feet)	Reference Noise Levels @ Reference Distance (dBA L_{eq})	Reference Noise Levels @ 50 Feet (dBA L_{eq})[5]
1	Truck Pass-Bys & Dozer Activity[1]	30'	63.6	59.2
2	Dozer Activity[1]	30'	68.6	64.2
3	Construction Vehicle Maintenance Activities[2]	30'	71.9	67.5
4	Foundation Trenching[2]	30'	72.6	68.2
5	Rough Grading Activities[2]	30'	77.9	73.5
6	Framing[3]	30'	66.7	62.3
7	Concrete Mixer Truck Movements[4]	50'	71.2	71.2
8	Concrete Paver Activities[4]	30'	70.0	65.6
9	Concrete Mixer Pour & Paving Activities[4]	30'	70.3	65.9
10	Concrete Mixer Backup Alarms & Air Brakes[4]	50'	71.6	71.6
11	Concrete Mixer Pour Activities[4]	50'	67.7	67.7

[1]As measured by Urban Crossroads, Inc. on 10/14/15 at a business park construction site located at the northwest corner of Barranca Parkway and Alton Parkway in the City of Irvine.
[2]As measured by Urban Crossroads, Inc. on 10/20/15 at a construction site located in Rancho Mission Viejo.
[3]As measured by Urban Crossroads, Inc. on 10/20/15 at a construction site located in Rancho Mission Viejo.
[4]Reference noise level measurements were collected from a nighttime concrete pour at an industrial construction site, located at 27334 San Bernardino Avenue in the City of Redlands, between 1:00 a.m. to 2:00 a.m. on 7/1/15.
[5]Reference noise levels are calculated at 50 feet using a drop off rate of 6 dBA per doubling of distance (point source).
Source: (Urban Crossroads, 2019f, Table 10-1)

travel lanes on each side of the roadway), 3) total average daily traffic (ADT), 4) travel speed, 5) percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, 6) roadway grade, 7) angle of view (e.g., whether the roadway view is blocked), 8) site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and 9) percentage of total ADT that flows each hour throughout a 24-hour period. (Urban Crossroads, 2019f, p. 35)

Table 4.11-5, *Roadway Parameters*, presents the FHWA Model roadway parameters used by Urban Crossroads for each of the six (6) roadway segments in the Study Area. For the purpose of the off-site analysis, soft site conditions were used to analyze the traffic noise impacts on each roadway segment in the study area because landscaping typically exists between the street surface and the noise receiver. (Urban Crossroads, 2019f, p. 36)

To quantify transportation-related noise levels, the vehicular trips associated with the Project were assigned to the six (6) roadway segments in the Study Area, using the trip distribution and vehicle mix information contained in the Project's traffic impact analysis prepared by Urban Crossroads (refer to *Technical Appendix K*) (Urban Crossroads, 2019f, p. 36).

Table 4.11-5 Roadway Parameters

ID	Roadway	Segment	Adjacent Planned Land Use (Existing if Different)[1]	Distance from Centerline to Nearest Adjacent Land Use (Feet)[2]	Vehicle Speed (mph)[3]
1	Cedar Av.	n/o Orange St.	Community Industrial (Vacant)	52'	40
2	Cedar Av.	n/o Slover Av.	Institutional/Industrial	52'	40
3	Cactus Av.	s/o Slover Av.	Industrial/Residential	44'	45
4	Slover Av.	e/o Cedar Av.	Institutional/Residential	52'	50
5	Slover Av.	e/o Larch Av.	Residential/Industrial	52'	50
6	Slover Av.	e/o Cactus Av.	Light Industrial	52'	45

[1]Sources: County of San Bernardino Fontana FH29 A Area Plan and the City of Rialto Land Use Policy Plan.
[2]Distance to adjacent land use is based upon the right-of-way distances for each functional roadway classification provided in the General Plan Circulation Elements.
[3]Source: Slover and Cactus Traffic Impact Analysis, May 2019.
Source: (Urban Crossroads, 2019f, Table 6-1)

C. *Vibration*

Vibration levels were predicted using reference vibration levels and logarithmic equations contained in the Federal Transit Administration's (FTA) 2006 publication: "Transit Noise and Vibration Impact Assessment." The vibration source levels for Project construction equipment are summarized in Table 4.11-6, *Vibration Source Levels for Construction Equipment.* (Urban Crossroads, 2019f, p. 39)

Table 4.11-6 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

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006; (Urban Crossroads, 2019f, Table 6-8)

4.11.6 Impact Analysis

Threshold a: ***Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

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 the Project's traffic. The detailed noise calculations for the analysis presented here are provided in Appendices 7.1 and 9.1 of *Technical Appendix J*.

A. Construction Noise Impact Analysis

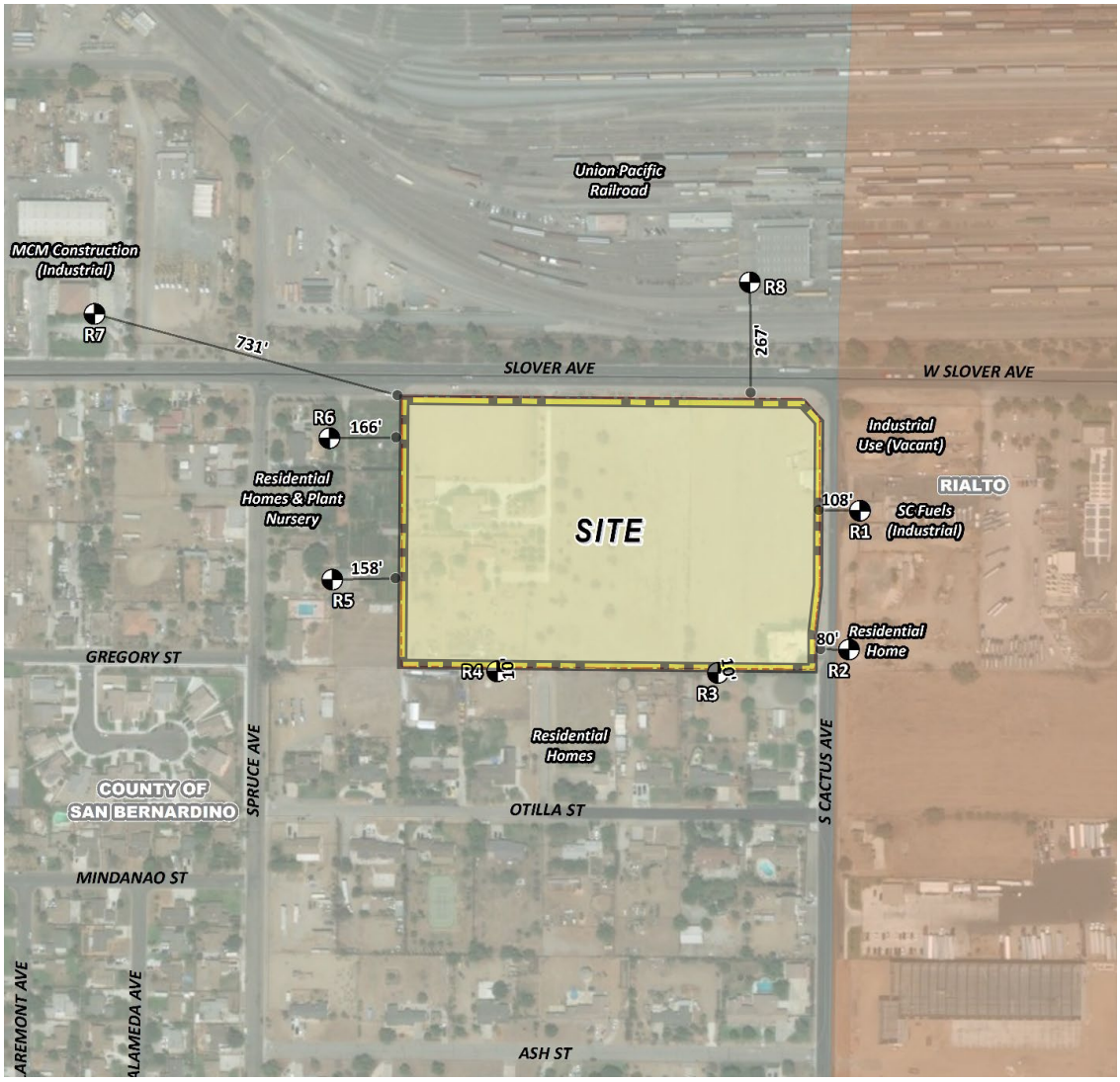
Construction activities on the Project site would occur primarily on weekdays during daylight hours; however, specific construction activities (i.e., concrete pouring for building foundation and tilt-up wall panels) may occur on weekdays during nighttime hours because daytime air temperatures are often too warm to pour and cure concrete. The County of San Bernardino would be required to approve any nighttime construction activities. Construction activities on the Project site are expected to proceed in six (6) stages: 1) demolition; 2) site preparation; 3) grading; 4) building construction; 5) paving; and 6) application of architectural coatings. These activities would create temporary periods of noise when heavy construction equipment is in operation and would cause a short-term increase in ambient noise levels.

The representative receiver locations used in the noise analysis in this Subsection are illustrated on Figure 4.11-2, *Noise Receiver Locations.* The receiver locations shown on Figure 4.11-2 represent five (5) noise sensitive receiver locations (Receivers R2, R3, R4, R5, and R6) and three (3) non-noise sensitive receiver locations (Receivers R1, R7, and R8). Construction noise levels were calculated at the six (6) noise sensitive receiver locations on Figure 4.11-2. The modeled noise-sensitive receiver locations include existing homes in the Project vicinity and are representative of existing sensitive receptors nearest the Project site. It is not necessary to study every single receiver location surrounding Project's construction area because receivers located at a similar distance from Project-related construction activities with similar ground elevations, orientation, and intervening physical conditions as the seven modeled receptor locations would experience the same or very similar noise effects as those disclosed herein. The daytime and nighttime Project construction noise levels at nearby sensitive receiver locations are summarized in Table 4.11-7 and Table 4.11-8.

Table 4.11-7 Project Construction Noise – Daytime

Receiver Location[1]	Highest Project Construction Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Temporary Worst-Case Project Contribution[6]	Threshold Exceeded?[7]
R2	71.3	L1	61.6	71.8	10.2	No
R3	77.9	L1	61.6	78.0	16.4	Yes
R4	77.9	L5	55.8	77.9	22.1	Yes
R5	62.8	L5	55.8	63.6	7.8	No
R6	62.5	L5	55.8	63.3	7.5	No

[1] Noise receiver locations are shown on Figure 4.11-2.
[2] Highest unmitigated Project construction noise levels as shown in Table 10-8 of *Technical Appendix J*.
[3] Ambient noise level measurement locations as shown on Figure 4.11-1.
[4] Observed daytime ambient noise levels as shown on Table 4.11-1.
[5] Represents the combined ambient conditions plus Project conditions.
[6] The temporary noise level increase expected with the addition of Project construction activities.
[7] Based on the 12 dBA L_{eq} significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Table 10-10).



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Receiver Locations — Distance from receiver to Project site boundary (in feet)

Source(s): Urban Crossroads (05-17-2019)

Figure 4.11-2

Not to Scale

Noise Receiver Locations

Table 4.11-8 Project Construction Noise – Nighttime

Receiver Location[1]	Nighttime Concrete Pour Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Temporary Worst-Case Project Contribution[6]	Threshold Exceeded?[7]
R2	69.5	L1	59.0	69.8	10.8	No
R3	76.0	L1	59.0	76.1	17.1	Yes
R4	76.0	L5	53.6	76.1	22.5	Yes
R5	61.0	L5	53.6	61.7	8.1	No
R6	60.6	L5	53.6	61.4	7.8	No

[1] Noise receiver locations are shown on Figure 4.11-2.
[2] Highest unmitigated Project construction noise levels as shown in Table 10-8 of *Technical Appendix J*.
[3] Ambient noise level measurement locations as shown on Figure 4.11-1.
[4] Observed daytime ambient noise levels as shown on Table 4.11-1.
[5] Represents the combined ambient conditions plus Project conditions.
[6] The temporary noise level increase expected with the addition of Project construction activities.
[7] Based on the 12 dBA L_{eq} significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Table 10-12).

As shown in Table 4.11-7 and Table 4.11-8, peak Project construction activities would not exceed the maximum 85 dBA L_{eq} threshold during daytime or nighttime hours; however, when considered with the existing noise environment in the Project area, Project construction would result in a more than 12 dBA L_{eq} contribution at Receptors R3 and R4, which represents a substantial temporary increase in ambient noise levels at these receptor locations. This analysis is conservative and assumes the worst-case scenario where various pieces of construction equipment are operating simultaneously along the Project site boundary, which may never actually occur. The daytime and nighttime noise from Project construction would be a significant impact at Receptors R3 and R4 and mitigation would be required.

B. Operational Noise Impact Analysis – Stationary Noise

Stationary (on-site) noise sources associated with long-term Project operation are expected to include idling trucks, delivery truck and automobile parking, delivery truck backup alarms, roof-top air conditioning units, emergency generators, and cargo handling equipment. The Project also is expected to generate noise during the loading and unloading of delivery trailers on-site.

Project stationary noise levels were calculated at all eight (8) receiver locations shown on Figure 4.11-2. These eight locations are representative of all receivers located nearest the Project site. As discussed on the preceding page, it is not necessary to study every single receiver location surrounding Project site because receivers located at similar distances from the Project site with similar ground elevations, orientation, and intervening physical conditions (e.g., walls, landscaping) as the eight modeled receptor locations would experience noise levels the same or very similar to those disclosed herein. The daytime and nighttime Project stationary noise levels at nearby receiver locations is summarized in Table 4.11-9, *Project Operational Noise – Stationary Noise.*

Table 4.11-9 Project Operational Noise – Stationary Noise

Receiver Location[1]	Land Use	Noise Level at Receiver Locations (dBA)[2]						Threshold Exceeded?[3]
		L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)	
Daytime	**Residential**	**55**	**55**	**60**	**65**	**70**	**75**	-
Nighttime		**45**	**45**	**50**	**55**	**60**	**65**	-
Anytime	**Industrial**	**70**	**70**	**75**	**80**	**85**	**90**	-
R1	Industrial	48.8	45.9	48.6	52.8	56.4	61.5	No
R2	Residential	40.9	37.9	39.4	42.5	46.8	56.8	No
R3	Residential	35.5	32.3	33.7	38.5	44.0	54.4	No
R4	Residential	34.0	30.9	32.4	37.1	42.5	52.6	No
R5	Residential	40.8	37.9	39.6	41.9	44.8	53.5	No
R6	Residential	47.1	44.2	46.9	51.0	54.7	59.6	Yes
R7	Industrial	38.4	35.4	38.2	42.5	46.2	51.2	No
R8	Industrial	47.2	44.2	47.1	51.6	55.3	60.0	No

[1] See Figure 4.11-2 for receiver locations.
[2] Estimated Project operational noise levels as shown on Table 9-2 of *Technical Appendix J.*
[3] Do the estimated Project operational noise levels meet the operational noise level standards defined in EIR Subsection 4.11.4?
"E. Avg." = Logarithmic (energy) average
Source: (Urban Crossroads, 2019f, Table 9-3)

As shown in Table 4.11-8, Project operations would not expose any nearby receptor to excessive noise levels during daytime hours but would exceed the applicable County of San Bernardino average noise energy (dBA L_{eq}) standard at Receptor R6 during nighttime hours. When considered in conjunction with existing ambient noise levels, the Project operations would contribute no more than 0.6 dBA L_{eq} during daytime hours and no more than 0.9 dBA L_{eq} during nighttime hours at all receiver locations (neither of which would exceed the applicable significance thresholds) (Urban Crossroads, 2019f, p. 56). Although Project operation would result in a relatively minimal contribution to the existing ambient noise environment, Project operations would expose Receptor R6 to noise levels that exceed the County of San Bernardino's nighttime standard – mostly due to the high existing ambient noise levels in the Project area – which is regarded as a significant impact for which mitigation would be required.

C. *Operational Noise Impact Analysis – Traffic Noise*

To evaluate off-site noise increases that could result from Project-related traffic, noise levels were modeled for the following scenarios:

- Existing plus Project
- Opening Year (2020)
- Horizon Year (2040)

The Existing plus Project (E+P) analysis determines the Project's traffic noise impacts under the theoretical scenario where traffic from the Project is added to existing conditions. The E+P scenario is presented to disclose direct impacts to the existing environment as required by CEQA. In the case of the proposed Project, the estimated time period between the commencement of the Project's CEQA analysis (2019) and Project buildout (2020) is one year. During this time period, traffic conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Therefore, the E+P scenario is very unlikely to materialize in real-world conditions when the proposed Project is constructed and becomes operational.

The Opening Year (2020) analysis provides an evaluation of traffic noise conditions at the time the Project becomes operational. The Opening Year analyses are utilized to determine the Project's potential to cumulatively contribute to near-term noise impacts upon consideration of existing traffic + ambient growth + Project traffic + traffic from cumulative development projects.

The Horizon Year (2040) analysis determines the potential for the Project to contribute to long-term noise impacts after the addition of growth expected from build out of local general plans and local cumulative development projects.

Refer to EIR Subsection 4.12, *Transportation*, for information about the distribution pattern of Project-related traffic. The trip distribution for the proposed Project was developed based on anticipated passenger car and truck travel patterns to-and-from the Project site. The traffic distribution pattern for Project-related truck trips and passenger car trips are shown in EIR Subsection 4.12 and discussed in more detail in the Project's technical Traffic Impact Analysis included as *Technical Appendix K* to this EIR.

1. Existing plus Project Conditions

As summarized in Table 4.11-10, *Existing plus Project Traffic Noise Levels*, Project traffic noise would not exceed the applicable significance thresholds under E+P traffic conditions. Therefore, the Project's contribution to off-site traffic noise would not result in a substantial permanent increase in ambient noise levels and Project-related impacts would be less than significant.

2. Opening Year Conditions

As summarized in Table 4.11-11, *Opening Year (2020) Traffic Noise Levels*, Project traffic noise would not exceed the applicable significance thresholds under Opening Year traffic conditions. Therefore, the Project's contribution to off-site traffic noise would not result in a substantial permanent increase in ambient noise levels and Project-related impacts would be less than significant.

Table 4.11-10 Existing plus Project Traffic Noise Levels

ID	Road	Segment	Adjacent Planned (Existing) Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	Cedar Av.	n/o Orange St.	Community Industrial (Vacant)	77.3	77.4	0.1	No	No
2	Cedar Av.	n/o Slover Av.	Institutional/Industrial	76.5	76.5	0.1	Yes	No
3	Cactus Av.	s/o Slover Av.	Industrial/Residential	77.6	77.7	0.0	Yes	No
4	Slover Av.	e/o Cedar Av.	Institutional/Residential	74.7	74.9	0.2	Yes	No
5	Slover Av.	e/o Larch Av.	Residential/Industrial	75.1	75.3	0.2	Yes	No
6	Slover Av.	e/o Cactus Av.	Light Industrial	72.7	72.8	0.1	No	No

[1] County of San Bernardino Fontana FH29A Area Plan and City of Rialto Land Use Policy Plan
[2] CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[3] Based on the significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Table 7-7)

Table 4.11-11 Opening Year (2020) Traffic Noise Levels

ID	Road	Segment	Adjacent Planned (Existing) Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	Cedar Av.	n/o Orange St.	Community Industrial (Vacant)	78.1	78.2	0.1	No	No
2	Cedar Av.	n/o Slover Av.	Institutional/Industrial	77.5	77.6	0.1	Yes	No
3	Cactus Av.	s/o Slover Av.	Industrial/Residential	78.3	78.4	0.0	Yes	No
4	Slover Av.	e/o Cedar Av.	Institutional/Residential	75.3	75.5	0.1	Yes	No
5	Slover Av.	e/o Larch Av.	Residential/Industrial	75.7	75.9	0.1	Yes	No
6	Slover Av.	e/o Cactus Av.	Light Industrial	73.2	73.3	0.1	No	No

[1] County of San Bernardino Fontana FH29A Area Plan and City of Rialto Land Use Policy Plan
[2] CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[3] Based on the significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Table 7-8)

3. Horizon Year Conditions

As summarized in Table 4.11-12, *Horizon Year (2040) Traffic Noise Levels*, Project traffic noise would not exceed the applicable significance thresholds under Horizon Year traffic conditions. Therefore, the Project's contribution to off-site traffic noise would not result in a substantial permanent increase in ambient noise levels and Project-related impacts would be less than significant.

Table 4.11-12 Horizon Year (2040) Traffic Noise Levels

ID	Road	Segment	Adjacent Planned (Existing) Land Use[1]	CNEL at Adjacent Land Use (dBA)[2]			Noise-Sensitive Land Use?	Threshold Exceeded?[3]
				No Project	With Project	Project Addition		
1	Cedar Av.	n/o Orange St.	Community Industrial (Vacant)	78.2	78.3	0.1	No	No
2	Cedar Av.	n/o Slover Av.	Institutional/Industrial	77.9	78.0	0.1	Yes	No
3	Cactus Av.	s/o Slover Av.	Industrial/Residential	78.8	78.8	0.0	Yes	No
4	Slover Av.	e/o Cedar Av.	Institutional/Residential	75.6	75.7	0.1	Yes	No
5	Slover Av.	e/o Larch Av.	Residential/Industrial	76.0	76.1	0.1	Yes	No
6	Slover Av.	e/o Cactus Av.	Light Industrial	73.6	73.7	0.1	No	No

[1] County of San Bernardino Fontana FH29A Area Plan and City of Rialto Land Use Policy Plan
[2] CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
[3] Based on the significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Table 7-8)

Threshold b: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

A. Construction Analysis

Construction activities on the Project site would utilize construction equipment that has the potential to generate vibration. Project construction-related vibration levels were calculated at the same six (6) receiver locations that were evaluated in the construction noise analysis (refer to Figure 4.11-2). Table 4.11-13, *Project Construction Vibration Levels*, summarizes Project construction vibration levels at the modeled receiver locations. As shown in Table 4.11-13 all receiver locations in the vicinity of the Project site would be exposed to vibration levels that fall below the applicable significance threshold (i.e., 0.2 in/sec PPV). Accordingly, Project construction would not generate temporary, excessive groundborne vibration or noise levels and a less-than-significant impact would occur.

B. Operational Analysis

Under long-term conditions, the operational activities of the proposed Project would not include or require equipment, facilities, or activities that would result in perceptible ground-borne vibration. Trucks would travel to and from the Project site on surrounding roadways; however, vibration and groundborne noise levels for heavy trucks operating at the posted speed limits on smooth, paved surfaces – as is expected on the Project site and surrounding roadways – typically approach 0.004 in/sec PPV, which is substantially lower than the applicable significance threshold (0.2 in/sec PPV). (Urban Crossroads, 2019f, p. 57) Accordingly, Project operation would not generate excessive groundborne vibration or groundborne noise levels and impacts would be less than significant.

Table 4.11-13 Project Construction Vibration Levels

Receiver[1]	Distance to Const. Activity (Feet)	Receiver PPV Levels (in/sec)[2]					Threshold (in/sec PPV)	Threshold Exceeded?[4]
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration		
R2	64'	0.001	0.009	0.019	0.022	0.022	0.2	No
R3	30'	0.002	0.027	0.058	0.068	0.068	0.2	No
R4	30'	0.002	0.027	0.058	0.068	0.068	0.2	No
R5	170'	0.000	0.002	0.004	0.005	0.005	0.2	No
R6	177'	0.000	0.002	0.004	0.005	0.005	0.2	No

[1] Receiver locations are shown on Figure 4.11-2.
[2] Based on the Vibration Source Levels of Construction Equipment included on Table 6-8 of *Technical Appendix J*.
[3] Vibration levels in PPV are converted to RMS velocity using a 0.71 conversion factor identified in the Caltrans Transportation and Construction Vibration Guidance Manual, September 2013.
[4] Does the peak vibration exceed the County of San Bernardino maximum acceptable vibration threshold?
Source: (Urban Crossroads, 2019f, Table 10-12)

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 two miles of a public airport r public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?***

The Project site is not located within two miles of a public airport or within an airport land use plan, nor is the Project site located within the vicinity of a private airstrip. As mentioned in Subsection 4.11.2C, the Project site is located within the AIA for the ONT; however, the Project site is not located within an ONT Noise Impact Zone (City of Ontario, 2010, Policy Map 2-3). Accordingly, the Project has no potential to expose people residing or working in the Project area to excessive airport noise. No impact would occur.

4.11.7 Cumulative Impact Analysis

The cumulative impact analysis considers construction and operation of the proposed Project in conjunction with other development projects in the vicinity of the Project site and resulting from full General Plan buildout in the County of San Bernardino, the City of Rialto, and surrounding areas.

A. Construction Noise

There are no known active or pending construction projects in the immediate vicinity of the Project site that would overlap with the Project's proposed construction schedule. Accordingly, there is no potential for the Project to contribute to the exposure of sensitive receptors to substantial temporary increases in ambient noise levels.

B. Stationary Noise

The analysis presented under Threshold "a" addresses the Project's noise contribution to existing cumulative noise sources (i.e., ambient noise) in the Project area. As previously shown on Table

4.11-8 the Project's noise contribution would not be perceptible to noise-sensitive receptors in the Project area during daytime or nighttime hours. The Project's permanent stationary noise impacts would not be cumulatively-considerable.

C. *Traffic Noise*

The analysis presented under Threshold "a" evaluates the Project's traffic noise contribution along Study Area roadways with consideration of near-term (Year 2020) and long-term (Year 2040) cumulative development. As summarized in Table 4.11-11 and Table 4.11-12, the Project's traffic noise contributions along study area roadways would not exceed applicable significance thresholds and, therefore, would not be cumulatively considerable under near- or long-term cumulative conditions.

D. *Groundborne Vibration and Noise*

During construction, the Project's peak vibration impacts would occur during the grading phase when large pieces of equipment, like bulldozers, are operating on-site. (During the non-grading phases of Project construction, when smaller pieces of equipment are used on-site, the Project's vibration would be minimal.) Vibration effects diminish rapidly from the source; therefore, the only reasonable sources of cumulative vibration in the vicinity of the Project site could occur on properties abutting the site. There are no known active or pending construction projects abutting the Project site that would overlap with the Project's proposed construction schedule. Accordingly, there is no potential for the Project to contribute to the exposure of persons to substantial temporary groundborne vibration or noise.

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. The Project would not cumulatively-contribute to the exposure of persons to excessive groundborne vibration or noise levels during long-term operation.

E. *Airport Noise*

The Project would not involve the construction, operation, or use of any public airports or public use airports. There are no conditions associated with implementation of the Project that would contribute airport noise or exposure of additional people to unacceptable levels of airport noise. Accordingly, the Project would have no potential to cumulatively contribute to impacts associated with noise from a public airport, public use airport, or private airstrip. Additionally, the Project site and the immediately surrounding area are not subject to substantial airport- or air traffic-related noise. Accordingly, there is no potential for cumulative development to expose persons residing or working in the Project area to excessive airport-related noise levels.

4.11.8 Significance of Impacts Before Mitigation

Threshold a: Significant Direct Impact. The Project would expose noise-sensitive receptors along the southern Project site boundary (i.e., Receivers R3 and R4) to excessive construction noise. In addition, potential nighttime operational activities on the Project site would expose a noise-sensitive receptor (i.e., Receiver R6) that abuts the northwest corner of the Project site to excessive noise levels.

Threshold b: Less-than-Significant Impact. The Project's construction and operational activities would not result in a perceptible groundborne vibration or noise.

Threshold c: No Impact. The Project site is not located within two miles of a public airport or within an airport land use plan, nor is the Project site located within the vicinity of a private airstrip.

4.11.9 Mitigation

The following mitigation measures would reduce Project construction noise at noise-sensitive receptor locations that have the potential to be exposed to excessive noise levels.

MM 4.11-1 A 12-foot-tall temporary noise barrier shall be installed along the southern Project site boundary for the duration of Project construction. The temporary noise barrier shall have a solid face from top to bottom and shall meet the following minimum standards:

a. The temporary noise barrier shall provide a minimum transmission loss of 20 dBA (Federal Highway Administration, Noise Barrier Design Handbook). The noise barrier shall be constructed using an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to a construction site perimeter fence or equivalent temporary fence posts or barrier materials;

b. The noise barrier must be maintained, and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired; and

c. The noise control barrier and associated elements shall be completely removed upon the conclusion of the construction activity.

MM 4.11-2 Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer's standards.

MM 4.11-3 Construction contractors shall place all stationary construction equipment so that all emitted noise is generated toward the center of the site and away from the noise sensitive receivers nearest the Project site.

MM 4.11-4 Construction contractors shall locate equipment staging areas on the Project site in locations that will create the greatest feasible distance between construction related noise sources and noise sensitive receivers nearest the Project site.

MM 4.11-5 Construction contractors shall ensure that delivery trucks use designated truck route(s).

The following mitigation measure would reduce nighttime noise from Project operation at noise level receiver locations that have the potential to be exposed to excessive noise levels.

MM 4.11-6 A minimum eight (8)-foot-tall noise barrier shall be constructed along the portion of the Project site's northwest boundary that abuts property with occupied residences. The location and maximum extent of the construction noise barrier is illustrated on Exhibit ES-A from the report titled "Slover and Cactus Warehouse Noise Impact Analysis," prepared by Urban Crossroads and dated May 17, 2019. The noise barrier shall meet be constructed of masonry block, an earthen berm, or any combination of construction materials capable of achieving a minimum weight of four (4) pounds per square foot and a minimum transmission loss of 20 dBA.

4.11.10 SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Threshold a: Less-than-Significant Impact with Mitigation Incorporated. Mitigation Measures MM 4.11-1 through MM 4.11-5 would require the Project to implement numerous measures to reduce noise during construction. These mitigation measures would reduce the Project's construction noise to less-than-significant levels at Receiver Locations R3 and R4, as summarized in Table 4.11-14, *Project Construction Noise Levels – With Mitigation*. With implementation of the required mitigation, the Project's construction noise would not result in a substantial temporary increase in ambient noise levels.

Table 4.11-14 Project Construction Noise Levels – With Mitigation

Daytime

Receiver Location[1]	Mitigated Project Construction Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Temporary Worst-Case Project Contribution[6]	Threshold Exceeded?[7]
R3	66.1	L1	61.6	67.4	5.8	No
R4	66.1	L5	55.8	66.5	10.7	No

Nighttime

Receiver Location[1]	Mitigated Project Construction Noise Level[2]	Measurement Location[3]	Reference Ambient Noise Levels[4]	Combined Project and Ambient[5]	Temporary Worst-Case Project Contribution[6]	Threshold Exceeded?[7]
R3	64.2	L1	59.0	65.3	6.3	No
R4	64.2	L5	53.6	64.6	11.0	No

[1] Noise receiver locations are shown on Figure 4.11-2.
[2] Mitigated Project construction noise levels.
[3] Ambient noise level measurement locations as shown on Figure 4.11-1.
[4] Observed ambient noise levels as shown on Table 4.11-1.
[5] Represents the combined ambient conditions plus Project conditions.
[6] The temporary noise level increase expected with the addition of Project construction activities.
[7] Based on the 12 dBA L_{eq} significance criteria defined in EIR Subsection 4.11.4.
Source: (Urban Crossroads, 2019f, Tables 10-11 and 10-13).

Mitigation Measure MM 4.11-6 would require the Project to construct a noise barrier between the primary truck access point/truck yard and abutting occupied residences (located at the northwest corner of the Project site). With implementation of the required mitigation, operation of the Project during nighttime hours would not expose Receiver R6 to stationary noise in excess of applicable County of San Bernardino standards, as summarized in Table 4.11-15, *Project Operational Noise (Stationary) – With Mitigation*.

Table 4.11-15 Project Operational Noise (Stationary) – With Mitigation

Receiver Location[1]	Land Use	Noise Level at Receiver Locations (dBA)[2]						Threshold Exceeded?[3]
		L_{eq} (E. Avg.)	L_{50} (30 mins)	L_{25} (15 mins)	L_{8} (5 mins)	L_{2} (1 min)	L_{max} (Anytime)	
Daytime	**Residential**	55	55	60	65	70	75	-
Nighttime		45	45	50	55	60	65	-
Anytime	**Industrial**	70	70	75	80	85	90	-
R6	Residential	43.9	41.0	43.3	46.9	50.3	56.0	No

[1] See Figure 4.11-2 for receiver locations.
[2] Estimated Project operational noise levels as shown on Table 9-2 of *Technical Appendix J.*
[3] Do the estimated Project operational noise levels meet the operational noise level standards defined in EIR Subsection 4.11.4?
"E. Avg." = Logarithmic (energy) average
Source: (Urban Crossroads, 2019f, Table 9-3)

4.12 TRANSPORTATION

This Subsection is based, primarily, on a traffic impact analysis (TIA) report prepared by Urban Crossroads, titled "Slover and Cactus Warehouse Traffic Impact Analysis, County of San Bernardino" and dated May 16, 2019, which is included as *Technical Appendix K* to this EIR (Urban Crossroads, 2019g). The TIA was prepared in accordance with the County of San Bernardino's traffic study requirements, and also, where relevant, addresses requirements of the County of San Bernardino Congestion Management Program and the California Department of Transportation's traffic study guidelines. Refer to Section 7.0, *References*, for a complete list of references.

4.12.1 STUDY AREA DESCRIPTION

The geographic area (hereafter referred to as the "Project Study Area" or "Study Area") that was evaluated for Project-related effects to the transportation network is defined as follows:

A. Intersections

Pursuant to its traffic study guidelines, the County of San Bernardino requires a performance analysis of intersections that would receive 50 or more peak hour trips from a development project. A "peak hour trip" is defined as a trip that occurs between the hours of 7:00 AM and 9:00 AM (AM peak hour) or between the hours of 4:00 PM and 6:00 PM (PM peak hour). The "50 peak hour trip" criteria utilized by the County of San Bernardino is consistent with the methodology utilized by many other CEQA lead agency and government jurisdictions, including the Counties of San Bernardino and Riverside and Orange, and generally represents a bright-line threshold at which a single development project would have a noticeable and potentially significant effect on the performance of a typical intersection. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a valid and proven way to establish a study area. (Urban Crossroads, 2019g, p. 4)

As discussed later in this Subsection (refer to Subsection 4.12.6), operation of the Project is not calculated to contribute 50 or more peak hour trips at any local intersection. Thus, rather than rely on the "50 peak hour trip" criteria described above to define the limits of the Project Study Area, the Study Area was formulated in consultation with County of San Bernardino and City of Rialto traffic engineering staff. The resulting Study Area includes the 13 intersections shown on Figure 4.12-1, *Study Area Intersection Locations*, and listed in Table 4.12-1, *Study Area Intersection Locations*. The Project study area includes nine (9) existing intersections and four (4) future intersections (i.e., driveways) that would be constructed as part of the Project. The Study Area includes intersections under the jurisdictions of the County of San Bernardino, City of Rialto, and the California Department of Transportation (Caltrans). (Urban Crossroads, 2019g, p. 4)

B. Freeways

All freeway mainline segments and ramps are under the jurisdiction of the Caltrans. Caltrans typically requests that CEQA lead agencies include an analysis of potential impacts to freeway mainline segments when a proposed project is calculated to contribute 50 or more two-way peak hour

trips to a State highway facility that is experiencing noticeable delay and approaching unstable traffic flow. Because impacts to freeway segments dissipate with distance from the point of entry to the State Highway System (i.e., at ramps receiving a project's traffic), Caltrans has indicated that when a project's traffic volumes dissipate to fewer than 50 peak hour trips on a freeway mainline segment, they become unrecognizable from other traffic on the State Highway System. Thus, Caltrans does not require a project's entire vehicular travel path on State highway facilities to be studied.

As discussed later in this Subsection (refer to Subsection 4.12.6), operation of the Project is not calculated to contribute 50 or more peak hour trips at any State highway facility. Notwithstanding, in order to present a comprehensive analysis, the Project Study Area includes all freeway segments, ramps, and merge/diverge areas adjacent to the points of entry that would be used by Project traffic. The six (6) freeway mainline segments, four (4) freeway ramps, and six (6) freeway merge/diverge ramp junctions included in the Study Area are listed in Table 4.12-2 through Table 4.12-4. (Urban Crossroads, 2019g, pp. 6-7)

4.12.2 EXISTING CONDITIONS

The Project site is located in the southwestern portion of San Bernardino County, at the southwest corner of the intersection of Slover Avenue and Cactus Avenue. The Project site is located south of Interstate 10 (I-10), approximately 1.0-roadway-mile southeast of the Cedar Avenue off-ramp and approximately 1.1-roadway-miles southwest of the Riverside Avenue off-ramp (Google Earth Pro, 2019).

A. Existing Local Roadway Conditions

Weekday AM and PM peak hour traffic count data was collected at Study Area intersections and roadway segments in March and April 2018; a growth factor was applied to reflect 2019 traffic conditions. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1 of *Technical Appendix K*. On the dates that traffic counts were collected, there were no atypical traffic conditions (e.g. construction activity or detour routes) and nearby schools were in session and operating on normal schedules. (Urban Crossroads, 2019g, p. 43)

The traffic count data includes a tabulation of passenger cars, 2-axle trucks, 3-axle trucks, and 4-or-more axle trucks. Larger vehicles take up more space on the roadway and take longer to accelerate and decelerate than smaller passenger vehicles; therefore, converting larger vehicles into passenger car equivalents (PCEs) allows for the real-world effect that larger vehicles have on roadways to be accurately reflected in the TIA and for traffic to be represented as a standardized unit. For purposes of this analysis, a PCE factor of 1.5 is applied to 2-axle truck trips, 2.5 is applied to 3-axle truck trips, and 3.0 is applied to 4-or-more-axle truck trips. These PCE factors follow the recommendations of the *San Bernardino County Congestion Management Plan (CMP)*. (Urban Crossroads, 2019g, p. 43)

Existing (2019) 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 4.12-2, *Existing Average Daily Traffic (PCE)*. Except where specifically noted, all of the

vehicle trips/traffic volumes presented in this EIR Subsection, including those illustrated on Figure 4.12-2, are shown in terms of PCE.

Existing peak hour traffic performance at the nine (9) existing Study Area intersections is summarized in Table 4.12-5, *Existing Intersection Levels of Service* and was calculated using the analysis methodologies presented later in this Subsection (refer to Subsection 4.12.4). As shown in Table 4.12-5, all intersections in the Study Area operate at acceptable LOS during peak hours under existing conditions.

B. Existing Freeway Conditions

Freeway mainline segment and interchange traffic volume data was obtained from Caltrans' Performance System (PeMS) website. Actual vehicles, as opposed to PCE volumes, were used to calculate freeway density and the corresponding LOS/ramp queuing summaries in accordance with the Transportation Research Board's *Highway Capacity Manual* (*HCM)*, an industry-standard methodology for freeway facilities. (Urban Crossroads, 2019g, p. 28) Figure 4.12-3, *Existing Freeway Mainline Volumes*, and Table 4.12-8, *Existing Freeway Ramp Merge/Diverge Levels of Service*, illustrates weekday, peak hour traffic volumes (actual vehicles) along freeway facilities in the Study Area.

1. Existing Freeway Mainline Performance

The peak hour LOS for each freeway mainline segment in the Study Area is summarized in Table 4.12-6, *Existing Freeway Mainline Levels of Service*. Peak hour operations along freeway mainline segments in the Study Area were calculated using the analysis methodologies presented in Subsection 4.12.4. As summarized in Table 4.12-6, all freeway mainline segments located in the Study Area operate at acceptable LOS during the peak hours under existing conditions with the exception of the I-10 Westbound segment west of Cedar Avenue and the I-10 Westbound segment east of Riverside Avenue, which both operate at LOS E during the PM peak hour.

2. Existing Freeway Ramp Performance

The existing peak hour queuing and merge/diverge LOS at freeway ramps in the Study Area are summarized in Table 4.12-7 and Table 4.12-8, respectively. These tables show that all freeway ramps and merge/diverge areas in the Study Area operate at an acceptable LOS under existing conditions. The peak hour queuing and merge/diverge performance were calculated using the analysis methodologies presented in Subsection 4.12.4.

C. Existing Mass Transit

The Project Study Area is served by Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. Omnitrans provides local bus service in the Project area via Route 29, which travels along Cedar Avenue, Slover Avenue, and Spruce Avenue in the Project Study Area. The nearest Route 29 transit stop is located approximately 430 feet northwest of the Project site, west of the intersection of Slover Avenue and Spruce. (Urban Crossroads, 2019g, p. 43)

D. Existing Pedestrian and Bicycle Facilities

Field observations collected by Urban Crossroads indicate nominal pedestrian and bicycle activity within the Project Study Area; however, several homes in the vicinity of the Project site keep animals and equestrian traffic within the vicinity of the Project site is not uncommon. Under existing conditions, there are no sidewalks along the Project site's frontages with Slover Avenue or Cactus Avenue; along Slover Avenue, the nearest sidewalk occurs on the north side of the street, approximately 600 feet west of the Project site, along Cactus Avenue, the nearest sidewalk occurs on the west side of the street immediately south of the Project site. In addition, there are no existing or proposed bicycle routes within the vicinity of the Project Study Area. (Urban Crossroads, 2019g, p. 37, Exhibit 3-7)

4.12.3 Applicable Environmental Plans, Policies, and Regulations

A. Local Plans, Policies, and 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. On April 7, 2016, SCAG adopted the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* with goals to: 1) preserve the existing transportation system; 2) expand the regional transit system; 3) expand passenger rail; 4) improve highway and arterial capacity; 5) manage demands on the transportation system; 6) optimize the performance of the transportation system; 7) promote forms of active transportation; 8) strengthen the regional transportation network for goods movement; 9) leverage technology; 10) improve airport access; and 11) focus new growth around transit (SCAG, 2016, pp. 6-8).

2. San Bernardino County Congestion Management Program

The *San Bernardino County Congestion Management Program (CMP)* was prepared by the San Bernardino Associated Governments (SANBAG). The *CMP* purpose is to create a link between land use, transportation, and air quality planning decisions and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds to alleviate traffic congestion and related impacts and improve air quality. The *San Bernardino County CMP* was first adopted in November 1992 and has since been updated 12 times, with the most recent comprehensive update in June 2016. Two (2) intersections in the Project Study Area are part of the *San Bernardino County CMP* regional arterial roadway network: Cedar Avenue and Slover Avenue (Intersection #4) and Riverside Avenue and Slover Avenue (Intersection #13) (Urban Crossroads, 2019g, Table 1-1). In addition, one *San Bernardino County CMP* freeway facility, I-10, is located in the Project Study Area.

3. *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. 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 "County 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 CMP*). (Urban Crossroads, 2019g, p. 13)

4. *County of San Bernardino Development Impact Fee (DIF) Program*

The County 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 County'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 County's Public Works Department. (Urban Crossroads, 2019g, pp. 13-14)

5. *County of San Bernardino, City of Rialto General Plan Circulation Elements*

The General Plans for the County of San Bernardino and City of Rialto each contain 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, each county/city has adopted specific transportation-related goals and policies that serve as the basis for their Circulation Element. Refer to *Technical Appendix K* for a detailed summary of the General Plan Circulation Elements for the County of San Bernardino and City of Rialto.

4.12.4 Traffic Impact Analysis Methodology

The Project traffic impact analysis, as provided in *Technical Appendix K* and summarized in this Subsection, relied on the methodologies described on the following pages.

A. *Level of Service*

The performance of roadway facilities is described using the term "level of service" (LOS). LOS has been used as the basis for determining the significance of traffic impacts as standard practice in CEQA documents for decades. LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. In 2013, the California Legislature passed Senate Bill (SB) 743, which is intended to provide local governments with flexibility to balance the competition between the need to use the LOS metric for local traffic

planning and the need to provide infill housing and mixed-use commercial developments within walking distance of mass transit facilities, downtowns, and town centers. As a component of the State's revisions to the CEQA Guidelines in December 2018, lead agencies will be required to adopt VMT thresholds of significance by July 1, 2020 (CEQA Guidelines § 15064.3(c)). At the time this EIR was prepared, the County of San Bernardino in its capacity as Lead Agency, as well as surrounding local agencies in which the Project's traffic would circulate, use LOS as the significance criteria for evaluating the performance of transportation facilities. For this reason, a LOS metric and not a VMT metric is appropriately applied in the analysis presented in this EIR.

LOS-based performance criteria include six (6) classifications ranging from LOS A, representing completely free-flow conditions, to LOS F, representing a breakdown in flow that results in stop-and-go conditions. Table 4.12-9, *Signalized Intersection LOS Thresholds,* and Table 4.12-10, *Unsignalized Intersection LOS Thresholds*, summarize typical operational conditions at signalized and unsignalized intersections for each LOS classification, respectively. (Urban Crossroads, 2019g, pp. 23-25)

B. Intersection Capacity Analysis

The intersection LOS analysis is based on the traffic volumes observed on weekdays between 7:00 AM and 9:00 AM (AM Peak Hour) and 4:00 PM and 6:00 PM (PM Peak Hour). These AM and PM Peak Hours were selected for analysis because these hours typically experience the most traffic during a 24-hour period.

At signalized intersections, peak hour performance is calculated using the methodology described in the *HCM*. Intersection performance is based on the average control delay at each leg of the intersection. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. At signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 4.12-9. The traffic modeling and signal timing optimization software package Synchro (Version 10) was used to analyze signalized intersections capacity as specified in the *HCM*. (Urban Crossroads, 2019g, pp. 23-24)

At unsignalized intersections, operations were evaluated using the methodology described in the *HCM*. At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches comprising a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle, as shown in Table 4.12-10. (Urban Crossroads, 2019g, p. 24)

For a more detailed discussion on intersection capacity analysis methodology, refer to Subsection 2.2 of *Technical Appendix K*.

C. Freeway Analysis

1. Freeway Mainline Segment Analysis

For purposes of analysis, the freeway system in the Project Study Area was divided into segments defined by the freeway-to-arterial interchange locations. Freeway mainline performance is based upon peak hour directional volumes, and the freeway segment analysis is based on the methodology described in the *HCM* and performed using HCS7 software. The performance measure used by Caltrans to calculate LOS along freeway mainlines is vehicle density. Density is expressed in terms of passenger cars per mile per lane. Table 4.12-11, *Freeway Mainline LOS Thresholds*, summarizes the freeway segment LOS thresholds for each density range. (Urban Crossroads, 2019g, pp. 27-28)

For a more detailed discussion of freeway mainline segment analysis methodology, refer to Subsection 2.5 of *Technical Appendix K*.

2. Freeway Ramp Queuing Analysis

The traffic modeling software package Synchro was used to evaluate the performance of freeway ramps, in terms of vehicle queuing. Storage (turn-pocket) length recommendations at the ramps are based upon the 95th percentile queue, which represents the length of the queue during 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group. (Urban Crossroads, 2019g, pp. 25-26)

For more information on the freeway ramp queuing analysis methodology, refer to Subsection 2.3 of *Technical Appendix K*.

3. Freeway Ramp Junction Merge/Diverge Analysis

The freeway ramp junction merge/diverge analysis is based on the methodology recommended in the *HCM* and performed using HCS7 software. Although the *HCM* indicates the influence area for a freeway ramp merge/diverge junction is 1,500 feet, the Project's analysis was performed at all ramp locations with respect to the nearest on- or off-ramp at each interchange to be consistent with Caltrans guidance. The results – reported in passenger car per mile per lane – are calculated based on the existing number of travel lanes, number of lanes at the on- and off-ramps both at the analysis junction and at upstream and downstream locations (if applicable), and acceleration/deceleration lengths at each freeway ramp merge/diverge junction. (Urban Crossroads, 2019g, p. 29) Table 4.12-12, *Freeway Ramp Junction Merge/Diverge LOS Thresholds*, summarizes the freeway ramp junction merge/diverge LOS thresholds utilized in the analysis.

For more information on the freeway ramp junction merge/diverge analysis methodology, refer to Subsection 2.6 of *Technical Appendix K*.

D. Cumulative Projects

CEQA Guidelines § 15130 requires that an EIR disclose the impact from the Project along with the incremental impacts from closely-related past, present, and reasonably foreseeable future projects

(i.e., cumulative impact analysis). As previously described in EIR Subsection 4.0, *Environmental Analysis*, the Project's cumulative traffic impacts analysis utilizes a summary of projections approach plus a list of projects approach in order to provide a conservative analysis of cumulative impacts. Descriptive information about each project considered in the cumulative impact analysis can be found in EIR Subsection 4.0 and Subsection 4.6 of *Technical Appendix K*. (Urban Crossroads, 2019g, pp. 64-65)

E. Future Year Background Traffic

1. Opening Year (2020) Background Traffic

Opening Year (2020) background traffic forecasts are based upon a background (or ambient) growth rate of 2 percent (%) per year above existing conditions. This ambient growth factor is intended to approximate area-wide growth not accounted by the known cumulative development projects that were manually added to the traffic impact analysis (see Subsection 4.12.4D, above). According to regional population projections included in SCAG's *2016 RTP/SCS*, the County of San Bernardino's population is projected to increase 16.41% between 2012 and 2040, which corresponds to an approximately 0.54% annual population growth rate. Over this same time period, employment within San Bernardino is projected to increase by 18.15%, which corresponds to an approximately 0.59% annual employment growth rate. Not every new person, household, and/or job in the County of San Bernardino is expected to translate on a one-to-one basis with a new vehicle trip in the region; therefore, the 2% annual growth rate used for the Project's traffic analysis establishes a conservative estimate of the local growth rate. Based on the foregoing information, the 2% ambient growth rate utilized in the Project's traffic analysis is appropriate and would tend to overstate, as opposed to understate, potential impacts to traffic and circulation. (Urban Crossroads, 2019g, p. 64)

For more information on the derivation of opening year background traffic forecasts, refer to Subsection 4.5 of *Technical Appendix K*.

2. Horizon Year (2040) Background Traffic

Horizon Year (2040) background traffic conditions were derived from the San Bernardino County Transportation Analysis Model (SBTAM). The SBTAM model reflects long-range land use and circulation network data from cities and public agencies within San Bernardino County and is consistent with SCAG's traffic model for the southern California region. The SBTAM model was supplemented and modified using industry-accepted procedures for model forecast refinement and smoothing rather than relying solely on SBTAM model defaults. The modifications to the SBTAM model were made to provide a conservative analysis of the Project's potential long-range traffic impacts under Horizon Year (2040) conditions and would overstate – as opposed to understate – potential traffic impacts relative to the model outputs that would result from reliance on the SBTAM model defaults. (Urban Crossroads, 2019g, pp. 65, 69)

Refer to Subsection 4.7 of *Technical Appendix K* for a detailed description of the refinements made to the SBTAM model for purposes of the Project's traffic impact analysis.

F. Future Year Roadway Conditions

1. Project-Related Roadway Improvements

The roadway improvements proposed by the Project are described in detail in EIR Section 3.0, *Project Description*. The construction of these roadway improvements is assumed throughout the analysis presented in *Technical Appendix K* and this Subsection.

2. Opening Year (2020) Roadway Conditions

The traffic analysis assumes that the traffic facilities listed below would be in place for the Project's Opening Year (2020) (Urban Crossroads, 2019g, p. 81):

- Driveways and those facilities that would be installed as part of the proposed Project to provide access to the Project site, including the Project's proposed frontage improvements to Slover Avenue and Cactus Avenue; and
- Driveways and those facilities assumed to be constructed by nearby cumulative development projects to provide access to the respective sites.

3. Horizon Year (2040) Roadway Conditions

The traffic analysis assumes that the County of San Bernardino's and the City of Rialto's roadway networks, as described in the County's General Plan Circulation Element, would be fully built-out, in addition to the improvements described in Subsections 4.12.4F1 and 4.12.4F2, above (Urban Crossroads, 2019g, p. 97).

G. Fair Share Calculation

In instances where a "fair-share" monetary contribution toward the construction of roadway improvements is recommended to correct the circulation deficiency, the Project's fair-share contribution is determined by the equation presented below (Urban Crossroads, 2019g, p. 32). This calculation establishes a proportional nexus between the Project's impact and the recommended monetary contribution.

Project Fair Share % = Project Traffic ÷ (2040 with Project Total Traffic - Existing Traffic)

Refer to Subsection 2.9 of *Technical Appendix K* for more information on the methodology used to calculate fair share contribution toward future roadway improvements.

4.12.5 BASIS FOR DETERMINING SIGNIFICANCE

The Project would result in a significant impact to the transportation system if the Project or any Project-related component would:

a. *Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*

b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);*

c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or*

d. *Result in inadequate emergency access.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects that development projects could have on the circulation network.

The specific criteria described below are utilized to evaluate the significance of potential traffic impacts under Threshold "a" and are based on applicable County of San Bernardino, City of Rialto, and Caltrans performance standards. The Project would result in a substantial adverse effect to the performance of the circulation system if any of the following situations occur (Urban Crossroads, 2019g, pp. 30-32):

San Bernardino County Intersections

- A direct impact would occur if, under Existing plus Project (E+P) traffic conditions, Project-related traffic would:
  - Cause a signalized study area intersection to degrade from an acceptable level of service (LOS D or better) to an unacceptable level of service (LOS E or LOS F);
  - Cause an unsignalized intersection to degrade from an acceptable level of service (LOS D or better) to an unacceptable level of service (LOS E or LOS F);
  - Cause an unsignalized intersection that operates at an unacceptable level of service (LOS E or LOS F) without the Project to meet a peak hour traffic signal warrant; or
  - Contribute 10 or more trips to any approach of an unsignalized intersection that operates at an unacceptable level of service (LOS E or LOS F) without the Project.

- A cumulatively considerable impact would occur if, under the Opening Year or Horizon Year traffic conditions, the Project would contribute traffic to an intersection that already operates at an unacceptable level of service (LOS E or F) without the Project.

City of Rialto Intersections

- A direct impact would occur if under Existing plus Project (E+P) traffic conditions: 1) an intersection operates at LOS A or LOS B without the Project and the addition of Project

traffic would increase the average delay at the intersection by 10.0 or more seconds; 2) an intersection operates at LOS C without the Project and the addition of Project traffic would increase the average delay at the intersection by 8.0 or more seconds; 3) an intersection operates at LOS D without the Project and the addition of Project traffic would increase the average delay at the intersection by 5.0 or more seconds; 4) an intersection operates at LOS E without the Project and the addition of Project traffic would increase the average delay at the intersection by 2.0 or more seconds; and 5) an intersection operates at LOS F without the Project and the addition of Project traffic would increase the average delay at the intersection by 1.0 or more seconds.

- A cumulatively-considerable impact would occur if under Opening Year or Horizon Year traffic conditions: 1) an intersection operates at LOS A or LOS B without the Project and the addition of Project traffic would increase the average delay at the intersection by 10.0 or more seconds; 2) an intersection operates at LOS C without the Project and the addition of Project traffic would increase the average delay at the intersection by 8.0 or more seconds; 3) an intersection operates at LOS D without the Project and the addition of Project traffic would increase the average delay at the intersection by 5.0 or more seconds; 4) an intersection operates at LOS E without the Project, and the addition of Project traffic would increase the average delay at the intersection by 2.0 or more seconds; and 5) an intersection operates at LOS F without the Project and the addition of Project traffic would increase the average delay at the intersection by 1.0 or more seconds.

Caltrans Facilities

- A direct impact would occur if the Project would cause an intersection, freeway mainline segment, or ramp junction to degrade from an acceptable level of service (LOS D or better) to an unacceptable level of service (LOS E or F).
- A cumulatively-considerable impact would occur if the Project contributes substantial traffic (i.e., 50 or more peak hour trips) to an intersection, freeway mainline segment, or ramp junction that already operates at an unacceptable level of service (LOS) without the Project.
- Stacking distance on freeway ramps is acceptable if the required 95th percentile queue length is less than or equal to the stacking distance provided. Therefore, a significant direct or cumulative impact would occur if Project-related traffic would cause or contribute to the 95th percentile queue exceeding the stacking distance provided.

In instances where a roadway facility may fall under the jurisdiction of multiple agencies, the more stringent threshold will be applied to determine the significance of the impact.

4.12.6 IMPACT ANALYSIS

Threshold a: Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

❑ Project Vehicle Trip Generation

Vehicle trip generation represents the amount of traffic that is associated with a development project. Determining traffic generation for a specific project is, therefore, based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses proposed by a given project.

Project vehicle trips were calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual (10th Edition, 2017)* trip generation rate and vehicle mix (i.e., percentage of passenger cars trips vs. truck trips) for warehouse land uses (ITE Code 150). The *Trip Generation Manual* does not provide guidance on truck fleet mix (i.e., percentage of 2-axle, 3-axle, and 4-or-more axle trucks); therefore, assumptions regarding truck vehicle mix are based on recommendations provided by the South Coast Air Quality Management District (SCAQMD). (Urban Crossroads, 2019g, p. 57) Based on data from the ITE and the recommendations of the SCAQMD, Project operation is calculated to generate 449 actual daily vehicle trips, including 359 daily passenger car trips and 90 daily truck trips (Urban Crossroads, 2019g, Table 4-2).

As noted earlier in this Subsection, PCE trips are a better metric to reflect the real-world effect of larger vehicles (i.e., trucks) on the circulation system than are actual vehicle trips. Additionally, the County of San Bernardino requires the use of PCE trips for traffic impact analyses for non-residential projects (SBAG, 2016, Appendix B-2). Table 4.12-13, *Project Trip Generation Summary*, summarizes the Project's trip generation with PCE factors applied. After applying the PCE factors, Project operation is calculated to generate 587 daily PCE trips, including 57 PCE trips in the AM peak hour and 64 PCE trips in the PM peak hour (Urban Crossroads, 2019g, Table 4-1). The Project's PCE trips are utilized throughout the analysis in *Technical Appendix K* and presented in this EIR Subsection to evaluate the Project's effect to the transportation and circulation network unless specifically noted.

For more information on the trip generation methodology, refer to Subsection 4.1 of *Technical Appendix K*.

❑ Project Vehicle Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by a development project's traffic. The trip distribution for Project traffic was developed based on anticipated passenger car and truck travel patterns to-and-from the Project site. The traffic distribution pattern for Project truck trips is illustrated on Figure 4.12-4, *Project Truck Trip Distribution*, and the traffic distribution pattern for Project passenger car trips is illustrated on Figure 4.12-5, *Project Passenger Car Trip Distribution*. (Urban Crossroads, 2019g, p. 60)

Based on Project traffic generation and trip distribution patterns, Project operation would contribute the average daily traffic (ADT) to Study Area roadways and peak hour traffic volumes at Study Area intersections shown on Figure 4.12-6 through Figure 4.12-9.

❑ Analysis Scenarios

The Project traffic analysis addressed each of the scenarios listed below.

- Short-term Construction Conditions
- Existing (2019) plus Project Conditions
- Opening Year (2020)
- Horizon Year (2040)

The Short-term Construction conditions analysis evaluates the potential for the Project construction traffic to result in an adverse effect to the local roadway system.

The Existing (2019) plus Project (E+P) analysis evaluates the potential for Project traffic to directly impact the roadway system under the theoretical scenario where the Project is operational under existing conditions. The E+P scenario is presented to disclose direct impacts as required by CEQA. In the case of the proposed Project, the estimated time period between the commencement of the Project's CEQA analysis (2019) and Project buildout (2020) is one year. During this time period, traffic conditions are not static – other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Therefore, the E+P scenario is very unlikely to materialize in real-world conditions when the proposed Project is constructed and becomes operational.

The Opening Year (2020) analysis includes an evaluation of traffic conditions at full buildout of the Project. The Opening Year analysis is utilized to determine the potential for Project traffic to cumulatively contribute to near-term circulation system deficiencies upon consideration of existing traffic + ambient growth + Project traffic + traffic from cumulative development projects.

The Horizon Year (2040) analysis is utilized to determine if planned improvements funded through local and regional transportation mitigation fee programs, such as the County of San Bernardino Development Impact Fee program or other approved funding mechanisms, can accommodate the Study Area's expected long-term growth at the target LOS identified in the Circulation Elements of relevant General Plans.

Refer to *Technical Appendix K* for a detailed discussion of the methodologies and assumptions for each analysis scenario, and a list of cumulative development projects considered in the analysis.

A. *Impact Analysis for Short-Term Construction Traffic Conditions*

1. Intersection Impact Analysis

During Project construction, traffic to-and-from the subject property would be generated by activities such as construction worker trips, construction materials deliveries, and the use/delivery of heavy equipment.

Construction worker vehicular traffic would be substantially less than peak hour traffic volumes generated during Project operation – which already would fall below 50 peak hour trips at all Study Area intersections and would not result in any significant direct impacts (see Item "B," below) – because construction activities typically begin and end outside of the peak hours. Accordingly, a majority of construction workers would not be driving to or from the Project site during hours of peak congestion and traffic from construction workers is not expected to result in a substantial adverse effect to Project Study Area intersections.

Construction materials deliveries to the Project site also would also have a nominal effect to Project Study Area intersections. Construction materials would be delivered to the site throughout the construction phase – mostly outside of peak hours – based on need and would not occur on an everyday basis. The total number of daily, peak-hour construction materials deliveries to the Project site is expected to be well below the number of trips during Project operation, which is shown to result in a less-than-significant direct impact, see Item "B," below). Accordingly, construction materials deliveries to the Project site is not expected to result in a substantial adverse effect to Project Study Area intersections.

Heavy equipment would be used on the Project site during Project construction. As most heavy equipment is not authorized to be driven on public roadways, most equipment would be delivered and removed from the site via flatbed trucks (sometimes with multiple pieces of equipment delivered to the site on a single trip). As with the delivery of construction materials, the delivery of heavy equipment to the Project site would not occur on a daily basis but would occur periodically throughout the construction phase based on need. As described in EIR Section 3.0, *Project Description*, only up to eight (8) pieces of heavy, off-road construction equipment are expected on the Project site during any given phase of construction; therefore, deliveries of construction equipment to the Project site is not expected to generate substantial traffic.

Based on the foregoing, traffic generated by Project construction would not result in a conflict with a program, plan, ordinance, or policy addressing the performance of the circulation system. Impacts during Project construction would be less than significant.

2. Freeway Impact Analysis

❑ Freeway Mainline Segments

As previously disclosed in Table 4.12-6, two (2) freeway mainline segment in the Project Study Area operate at a deficient LOS under existing conditions (i.e., without Project-related traffic): the I-10

Westbound segments located west of Cedar Avenue and located east of Riverside Avenue, both of which operate deficiently during the PM peak hour. Project construction traffic would not exacerbate the existing peak hour freeway mainline segment deficiency listed above or cause any new peak hour deficiencies because Project construction traffic during the peak hour would be minimal (as described in detail under Threshold "a"). Impacts to Study Area freeway mainline segments from Project construction traffic would be less than significant.

❑ **Freeway Ramps**

As shown in Table 4.12-7 and Table 4.12-8, all freeway ramps and merge/diverge junctions in the Project Study Area experience acceptable queuing and operate at acceptable LOS under existing conditions. Project construction traffic would not cause any peak hour deficiencies because Project construction peak hour traffic would be minimal (as described in detail under Threshold "a"). Accordingly, impacts to freeway ramp operations and merge/diverge junctions from Project construction traffic would be less than significant.

B. Impact Analysis for Existing plus Project Traffic Conditions

1. Intersection Impact Analysis

Projected weekday ADT volumes and peak hour intersection volumes in the Study area under E+P traffic conditions are shown on Figure 4.12-7, *Existing plus Project Average Daily Traffic*. Table 4.12-14, *Existing plus Project Intersection Analysis*, summarizes the peak hour LOS at Study Area intersections under E+P conditions. As shown in Table 4.12-4, all Study Area intersections would operate at acceptable LOS under E+P traffic conditions. Accordingly, implementation of the Project would result in less-than-significant impacts to Study Area intersections under E+P conditions.

2. Freeway Impact Analysis

❑ **Freeway Mainline Segments**

Table 4.12-15, *Existing plus Project Freeway Mainline Analysis*, summarizes the LOS along Project Study Area freeway mainline segments under E+P conditions. As shown in Table 4.12-15, all Study Area freeway mainline segments would operate at acceptable LOS under E+P conditions with the exception of the two segments listed below:

- I-10 Westbound, west of Cedar Avenue – LOS E in the PM peak hour; and
- I-10 Westbound, east of Riverside Avenue – LOS E in the PM peak hour.

As previously disclosed in Subsection 4.12.2, the I-10 Westbound segment located west of Cedar Avenue and the I-10 Westbound segment located east of Riverside Avenue operate at unacceptable LOS in the PM peak hour under existing conditions (i.e., without Project traffic); therefore, Project traffic would not cause the PM peak hour deficiency at these freeway mainline segments. The direct impact of Project traffic on the I-10 Westbound segments located west of Cedar Avenue and located east of Riverside Avenue would be less than significant under E+P traffic conditions. Furthermore, the Project would contribute only 21 trips to the I-10 Westbound segment located west of Cedar

Avenue during the affected peak hour and would contribute five (5) trips to the I-10 Westbound segment located east of Riverside Avenue during the affected peak hour. Because the Project's traffic contribution to the deficient I-10 Westbound segments is less than substantial (i.e., less than 50 peak hour trips) the Project's share of the impact is not cumulatively considerable under E+P traffic conditions.

The freeway mainline segments located in the Project Study Area, listed in Table 4.12-15, include the segments that would receive the highest concentration of traffic from the Project. However, Project traffic does not stop at the limits of the Study Area. Rather, Project traffic continues to travel throughout the southern California region along the State Highway System, dissipating as distance from the Project site increases. As such, Project traffic has the potential to travel along freeway mainline segments that experience unacceptable levels of service, such as SR-60, SR-91, I-5, I-15, I-215, I-110, I-405, and I-710, among others. All State Highway System facilities that operate at an unacceptable LOS are considered to be cumulatively impacted; however, because Project operation would contribute fewer than 50 peak hour trips to any congested freeway segment beyond the Project Study Area, the Project's effect on State highway system mainline segments located outside of the Study Area would not be cumulatively-considerable under E+P traffic conditions.

❑ Freeway Ramps

As summarized in Table 4.12-16 and Table 4.12-17, all Project Study Area freeway ramps would experience acceptable queuing and would have merge/diverge junctions that operate at acceptable LOS under E+P traffic conditions. Accordingly, implementation of the Project would result in less-than-significant impacts to freeway ramp operations under E+P conditions.

C. Opening Year (2020) Impact Analysis

1. Intersection Impact Analysis

Projected weekday ADT volumes and peak hour intersection volumes for Opening Year (2020) traffic conditions are shown on Figure 4.12-8, *Opening Year (2020) Average Daily Traffic*. As summarized in Table 4.12-18,
Opening Year (2020) Intersection Analysisthe following four (4) Study Area intersections would operate at unacceptable LOS under Opening Year traffic conditions.

- Cedar Avenue and I-10 Eastbound Ramps (Intersection #2) – LOS E in the PM peak hour;
- Cedar Avenue and Slover Avenue (Intersection #4) – LOS E in the AM and PM peak hours;
- Riverside Avenue and I-10 Eastbound Ramps (Intersection #12) – LOS E in the PM peak hour; and
- Riverside Avenue and Slover Avenue (Intersection #13) – LOS F in the AM and PM peak hours.

The Project's contribution to the LOS deficiencies at Intersections #2, #4, and #13 would exceed the applicable thresholds of significance and Project impacts would be cumulatively-considerable under Opening Year traffic conditions.

Intersection #12 is under the shared jurisdiction of the City of Rialto and Caltrans. Pursuant to the City of Rialto's significance threshold for intersections operating at LOS E, the Project's traffic contribution at Intersection #12 would be less than significant because Project traffic would only result in a 1.6-second increase to the average PM peak hour delay (which is less than the City's threshold of a 2.0 or more seconds increase). Pursuant to the Caltrans threshold of significance, the Project's traffic contribution at Intersection #12 would be less than significant because the Project would only send 19 trips to the intersection during the affected peak hour (which does not meet the Caltrans standard for substantial traffic – 50 peak hour trips). Accordingly, the Project's contribution to the Opening Year LOS deficiency at Intersection #12 would not be cumulatively considerable.

2. Freeway Impact Analysis

❑ Freeway Mainline Segments

Table 4.12-19, *Opening Year (2020) Freeway Mainline Analysis*, summarizes the LOS along freeway mainline segments within the Project Study Area under Opening Year conditions. As shown in Table 4.12-19, all Study Area freeway mainline segments would operate at acceptable LOS under Opening Year (2020) conditions with the exception of the following:

- I-10 Westbound, west of Cedar Avenue – LOS E in the AM and PM peak hours; and
- I-10 Westbound, east of Riverside Avenue – LOS E in the PM peak hour.

Under Opening Year traffic conditions, the Project would not contribute less than 50 peak hour trips to any of the above-listed mainline segments during the affected peak hours. The I-10 Westbound segment located west of Cedar Avenue only would receive six (6) Project trips during the AM peak hour and 21 Project trips during the PM peak hour while the I-10 Westbound segment located east of Riverside Avenue only would receive five (5) Project trips during the PM peak hour. Because the Project's traffic contribution to the deficient I-10 Westbound segments is less than substantial (i.e., less than 50 peak hour trips) during the affected peak hours, the Project's share of the impact is not cumulatively considerable under Opening Year traffic conditions.

The freeway mainline segments located in the Project Study Area, listed in Table 4.12-19, include the segments that would receive the highest concentration of traffic from the Project. However, Project traffic does not stop at the limits of the Study Area. Rather, Project traffic continues to travel throughout the southern California region along the State Highway System, dissipating as distance from the Project site increases. As such, Project traffic has the potential to travel along freeway mainline segments that experience unacceptable levels of service, such as SR-60, SR-91, I-5, I-15, I-215, I-110, I-405, and I-710, among others. All State Highway System facilities that operate at an unacceptable LOS are considered to be cumulatively impacted; however, because Project operation would contribute fewer than 50 peak hour trips to any congested freeway segment beyond the Project

Study Area, the Project's effect on State highway system mainline segments located outside of the Study Area would not be cumulatively-considerable under Opening Year traffic conditions.

❑ **Freeway Ramps**

All freeway ramps in the Project Study Area would experience acceptable queuing and operate at acceptable LOS under Opening Year conditions, as summarized in Table 4.12-20 and Table 4.12-21. Accordingly, implementation of the Project would result in less-than-significant impacts to freeway ramp operations under Opening Year traffic conditions.

D. Horizon Year (2040) Impact Analysis

1. Intersection Impact Analysis

Projected weekday ADT volumes and peak hour intersection volumes for Horizon Year (2040) traffic conditions are shown on Figure 4.12-9, *Horizon Year (2040) Average Daily Traffic*. Table 4.12-22 summarizes the LOS at Study Area intersections during the AM and PM peak hours under Horizon Year traffic conditions. As shown in Table 4.12-22, the following intersections would operate at deficient LOS in the Horizon Year:

- Cedar Avenue and I-10 Westbound Ramps (Intersection #1) – LOS F in the AM peak hour and LOS E in the PM peak hour;
- Intersection #2 – LOS E in the AM peak hour and LOS F in the PM peak hour;
- Intersection #4 – LOS E in the AM peak hour and LOS F in the PM peak hour;
- Cactus Avenue and Slover Avenue (Intersection #8) – LOS F in the PM peak hour;
- Intersection #12 – LOS E in the AM peak hour and LOS F in the PM peak hour; and
- Intersection #13 – LOS F in the AM and PM peak hour.

The Project's contribution to the LOS deficiencies at the above-listed intersections would exceed the applicable thresholds of significance and the Project's impacts would be cumulatively considerable under Horizon Year traffic conditions.

2. Freeway Impact Analysis

❑ **Freeway Mainline Segments**

Table 4.12-23, *Horizon Year (2040) Freeway Mainline Analysis*, summarizes the LOS freeway mainline segments within the Project Study Area under Horizon Year conditions. As shown in Table 4.12-23, two (2) Project Study Area freeway mainline segments (listed below) would operate at deficient LOS in the Horizon Year (2040):

- I-10 Westbound, west of Cedar Avenue – LOS E in the AM and PM peak hour;
- I-10 Westbound, east of Riverside Avenue – LOS E in the AM and PM peak hour;
- I-10 Eastbound, east of Cedar Avenue – LOS E in the AM peak hour; and
- I-10 Eastbound, east of Riverside Avenue – LOS E in the AM and PM peak hour.

Under Horizon Year traffic conditions, the Project would not contribute less than 50 peak hour trips to any of the above-listed mainline segments during the affected peak hours. The I-10 Westbound segment located west of Cedar Avenue only would receive six (6) Project trips during the AM peak hour and 21 Project trips during the PM peak hour while the I-10 Westbound segment located east of Riverside Avenue only would receive 12 Project trips during the AM peak hour and five (5) Project trips during the PM peak hour. The I-10 Eastbound segment located east of Cedar Avenue only would receive (6) Project trips during the AM peak hour while the I-10 Eastbound segment located east of Riverside Avenue would receive four (4) Project trips during the AM peak hour and 13 Project trips during the PM peak hour. Because the Project's traffic contributions to the deficient I-10 Westbound and I-10 Eastbound segments listed above is less than substantial (i.e., less than 50 peak hour trips) during the affected peak hours, the Project's share of the impact is not cumulatively considerable under Horizon Year traffic conditions.

The freeway mainline segments located in the Project Study Area, listed in Table 4.12-23, include the segments that would receive the highest concentration of traffic from the Project. However, Project traffic does not stop at the limits of the Study Area. Rather, Project traffic continues to travel throughout the southern California region along the State Highway System, dissipating as distance from the Project site increases. As such, Project traffic has the potential to travel along freeway mainline segments that experience unacceptable levels of service, such as SR-60, SR-91, I-5, I-15, I-215, I-110, I-405, and I-710, among others. All State Highway System facilities that operate at an unacceptable LOS are considered to be cumulatively impacted; however, because Project operation would contribute fewer than 50 peak hour trips to any congested freeway segment beyond the Project Study Area, the Project's effect on State highway system mainline segments located outside of the Study Area would not be cumulatively-considerable under Horizon Year traffic conditions.

❑ Freeway Ramps

All freeway ramps in the Project Study Area would experience acceptable queuing under Horizon Year traffic conditions, as summarized in Table 4.12-24. Accordingly, implementation of the Project would result in less-than-significant impacts to freeway ramp queuing under Horizon Year traffic conditions.

Two ramp junctions are calculated to experience unacceptable merge/diverge operations under Horizon Year traffic conditions – I-10 Eastbound on-ramp at Cedar Avenue (AM & PM peak hour) and I-10 Eastbound on-ramp at Riverside Avenue (AM peak hour) – as shown on Table 4.12-25. However, because the Project's contribution to the I-10 on-ramps in question during the affected peak hours is less than substantial (i.e., less than 50 peak hour trips), the Project's share of the impacts to merge/diverge operations at the I-10 Eastbound on-ramp at Cedar Avenue (AM & PM peak hour) and the I-10 Eastbound on-ramp at Riverside Avenue (AM peak hour) is not cumulatively considerable under Horizon Year traffic conditions.

E. Public and Non-Vehicular Transportation

As a warehouse building, the Project is not likely to attract large volumes of pedestrian or bicycle traffic. The County of San Bernardino General Plan does not identify bicycle routes or pedestrian trails within the vicinity of the Project site (Urban Crossroads, 2019g, Exhibit 3-6 and Exhibit 3-7). Accordingly, the Project has no potential to conflict with any County-designated bikeways. Furthermore, the Project's driveways would be stop-sign controlled and sight distance at each Project driveway would be reviewed by the County of San Bernardino prior to the issuance of building permits to ensure that sight distance meets applicable County standards and provides for safe bicycle and pedestrian circulation.

Bus Route 29 operates in close proximity to the Project site; however, this bus route does not operate along roads that abut the Project site (Urban Crossroads, 2019g, p. 43). There are no other public transit services in the vicinity of the Project site under existing conditions. Accordingly, implementation of the Project would not conflict with local public transit service.

As demonstrated by the foregoing analysis, the Project would not conflict with adopted policies, plans or programs related to alternative transportation, or otherwise substantially decrease the performance or safety of such facilities, and a less-than-significant impact would occur.

Threshold b:	***Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

Pursuant to CEQA Guidelines Section 15064.3(c), the County of San Bernardino has until July 1, 2020, to implement CEQA Guidelines Section 15064.3(b). At the time of writing this EIR, the County had not established a VMT threshold of significance and was not requiring development projects, including the proposed Project, to demonstrate compliance with CEQA Guidelines Section 15064.3(b). Accordingly, the Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b).

Notwithstanding, Project automobile trips are calculated to travel 1,595,902 miles per year and Project truck trips are calculated to travel 1,306,547 miles per year under expected operating conditions (Urban Crossroads, 2019d, p. 26). The annual VMT from Project operation is presented for information purposes but is not factored into the determination of the potential for Project operation to result in a conflict or inconsistency with CEQA Guidelines Section 15064.3(b) or to result in any adverse effect to the local or regional transportation network.

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)?***

The types of traffic generated during operation of the Project (i.e., passenger cars and trucks) would be compatible with the type of traffic observed along Study Area roadways under existing conditions. In addition, all proposed improvements within the public right-of-way would be installed in

conformance with County design standards. The County of San Bernardino Public Works Department reviewed the Project's application materials and determined that no hazardous transportation design features would be introduced through implementation of the Project. Accordingly, the Project's construction and operation would not create or substantially increase safety hazards due to a design feature or incompatible use. Impacts would be less than significant.

Threshold d: Would the Project result in inadequate emergency access?

The County of San Bernardino reviewed the Project's design and confirmed that the Project would provide adequate access to-and-from the Project site for emergency vehicles and also that development of the Project would not interfere with the circulation of emergency vehicles along public streets that abut the site (i.e., Slover Avenue and Cactus Avenue). The County also will require the Project Applicant to provide adequate paved access to-and-from the site as a condition of Project approval. Furthermore, the County will review all future Project construction drawings to ensure that adequate emergency access is maintained along abutting public streets during construction activities. Based on the proposed Project design and with required adherence to County requirements for emergency vehicle access, no impact would occur.

4.12.7 Cumulative Impact Analysis

The analysis under Threshold "a" disclosed the Project's potential to affect the transportation network on a cumulative basis. As disclosed in the response to Threshold "a," the Project would result in cumulatively-considerable impacts at two (2) Study Area intersections under Opening Year traffic conditions and four (4) Study Area intersections under Horizon Year traffic conditions. The Project would not have a cumulatively-considerable impact on any of the freeway mainline segments, ramp queuing, or merge/diverge ramp junctions located within the Project Study Area.

The proposed Project would not conflict with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities and thus has no potential to contribute to a cumulative impact. The Project would have a less-than-significant cumulatively-considerable impact to adopted policies and programs regarding public transit, bicycle, and pedestrian facilities, as well as a less-than-significant cumulatively-considerable impact to the performance of such facilities.

The Project would not contribute to a significant cumulative impact under the topics discussed under Thresholds "c" and "d" because the Project would not cause or exacerbate existing transportation design safety concerns; or adversely affect emergency access.

4.12.8 Significance of Impacts Before Mitigation

Threshold a: Cumulatively-Considerable Impact. The addition of Project-related traffic would contribute to LOS deficiencies at Study Area intersections in the Opening Year and Horizon Year traffic conditions.

Threshold b: No Impact. Pursuant to CEQA Guidelines Section 15064.3(c), the County has until July 1, 2020, to implement CEQA Guidelines Section 15064.3(b). At the time of writing this EIR, the County of San Bernardino had not implemented CEQA Guidelines Section 15064.3(b).

Threshold c: Less-than-Significant Impact. No significant transportation safety hazards would be introduced as a result of the proposed Project.

Threshold d: No Impact. Adequate emergency access would be provided to the Project site during construction and long-term operation. The Project would not result in inadequate emergency access to the site or surrounding properties.

4.12.9 MITIGATION

The following mitigation measures would minimize the Project's cumulative impacts to the local roadway and circulation network.

MM 4.12-1 Prior to the issuance of building permits, the Project Applicant/Developer shall comply with the applicable requirements of County of San Bernardino Development Impact Fee Preserve (DIF) program, which requires fee payment to the County of San Bernardino (less any fee credits), a portion of which is used by the County to fund the installation of road and intersection improvements to reduce traffic congestion.

MM 4.12-2 Prior to the issuance of an occupancy permit, the Project Applicant/Developer shall make a fair-share payment to the County of San Bernardino, to be held in trust, for the construction of the improvements at the intersections listed below. The County of San Bernardino shall only use the funds for the construction of the improvements listed in Table 1-5 of the "Slover and Cactus Warehouse Traffic Impact Analysis," prepared by Urban Crossroads (dated April 12, 2019). The Project's fair-share obligations are listed in Table 1-6 of the same report. If within five years of the date of collection of the Project's fair-share fee payment, the County of San Bernardino has not completed the improvements or established a fair-share funding program for the specified improvements, then the County of San Bernardino shall return the funds to the Project Applicant/Developer.

a) Cedar Avenue and I-10 Westbound ramps;
b) Cedar Avenue and I-10 Eastbound ramps;
c) Cedar Avenue and Slover Avenue; and
d) Cactus Avenue and Slover Avenue.

MM 4.12-3 Prior to the issuance of an occupancy permit, the Project Applicant/Developer shall make a fair-share payment to the County of San Bernardino, to be held in trust for conveyance to the City of Rialto and/or Caltrans, for the construction of the improvements at the intersections listed below. The City or Rialto and/or Caltrans

shall only use the funds for the construction of the improvements listed in Table 1-5 of the "Slover and Cactus Warehouse Traffic Impact Analysis," prepared by Urban Crossroads (dated April 12, 2019). The Project's fair-share obligations are listed in Table 1-6 of the same report. If within five years of the date of collection of the Project's fair-share fee payment, the City of Rialto and/or Caltrans has not established a fair-share funding program for the specified improvements that the County of San Bernardino is able to make contributions to, then the County of San Bernardino shall return the funds to the Project Applicant/Developer.

a) Riverside Avenue and I-10 Eastbound ramps; and
b) Riverside Avenue and Slover Avenue.

4.12.10 Significance of Impacts After Mitigation

Threshold a: Significant and Unavoidable Impact. MM 4.12-1 requires the Project Applicant/Developer to contribute to the County of San Bernardino's Development Impact Fee (DIF) program and MM 4.12-2 requires the Project to participate in a fair-share funding program. Funds collected via MM 4.12-2 would be used to fund needed improvements to the local roadway system. Under CEQA, a monetary contribution to a mitigation fund is adequate mitigation if the funds are part of a reasonable plan that the relevant agency is committed to implementing.

As shown in Table 4.12-26 and Table 4.12-27, all Study Area intersections would operate at acceptable LOS under Opening Year and Horizon Year traffic scenarios with recommended improvements. However, to achieve acceptable levels of service along Study Area intersections, improvements are required that are either: 1) not under the sole jurisdictional authority of the County of San Bernardino (meaning the County cannot assure that the recommended improvements would be implemented); and/or 2) not included in any existing mitigation funding program to ensure a date-certain installation. Because the County of San Bernardino cannot assure that all the recommended improvements would be implemented and/or in place at the time of need, the Project's cumulatively considerable impacts at Intersection #1 (Horizon Year), Intersection #2 (Opening Year and Horizon Year), Intersection #4 (Opening Year and Horizon Year), Intersection #8 (Horizon Year), Intersection #12 (Horizon Year), and Intersection #13 (Opening Year and Horizon Year) are recognized as significant and unavoidable. No other feasible mitigation measures for these cumulatively considerable impacts are available that would have a proportional nexus to the Project's impact.

Table 4.12-1 Study Area Intersection Locations

ID	Intersection Location	Jurisdiction	CMP?
1	Cedar Av. & I-10 Westbound Ramps	Caltrans, SB County	No
2	Cedar Av. & I-10 Eastbound Ramps	Caltrans, SB County	No
3	Cedar Av. & Orange St.	SB County	No
4	Cedar Av. & Slover Av.	SB County	Yes
5	Larch Av. & Slover Av.	SB County	No
6	Driveway 1 & Slover Av. – Future Intersection	SB County	No
7	Driveway 2 & Slover Av. – Future Intersection	SB County	No
8	Cactus Av. & Slover Av.	SB County, Rialto	No
9	Cactus Av. & Driveway 3 – Future Intersection	SB County, Rialto	No
10	Cactus Av. & Driveway 4 – Future Intersection	SB County, Rialto	No
11	Riverside Av. & I-10 Westbound Ramps	Rialto, Caltrans	No
12	Riverside Av. & I-10 Eastbound Ramps	Rialto, Caltrans	No
13	Riverside Av. & Slover Av.	Rialto	Yes

Source: (Urban Crossroads, 2019g, Table 1-1)

Table 4.12-2 Study Area Freeway Mainline Segments

ID	Freeway Mainline Segments
1	I-10 Freeway – Westbound, West of Cedar Avenue
2	I-10 Freeway – Westbound, East of Cedar Avenue
3	I-10 Freeway – Westbound, East of Riverside Avenue
4	I-10 Freeway – Eastbound, West of Cedar Avenue
5	I-10 Freeway – Eastbound, East of Cedar Avenue
6	I-10 Freeway – Eastbound, East of Riverside Avenue

Source: (Urban Crossroads, 2019g, Table 1-2)

Table 4.12-3 Study Area Freeway Ramps

ID	Freeway Ramps
1	Cedar Avenue & I-10 Westbound Off-Ramp
2	Cedar Avenue & I-10 Eastbound Off-Ramp
3	Riverside Avenue & I-10 Westbound Off-Ramp
4	Riverside Avenue & I-10 Eastbound Off-Ramp

Source: (Urban Crossroads, 2019g, p. 50)

Table 4.12-4 Study Area Freeway Merge/Diverge Ramp Junctions

ID	Freeway Merge/Diverge Ramp Junctions
1	I-10 Freeway – Westbound, On-ramp at Cedar Avenue (Merge)
2	I-10 Freeway – Westbound, Off-ramp at Cedar Avenue (Diverge)
3	I-10 Freeway – Eastbound, Off-ramp at Cedar Avenue (Diverge)
4	I-10 Freeway – Eastbound, On-ramp at Cedar Avenue (Merge)

Source: (Urban Crossroads, 2019g, Table 1-3)

Table 4.12-5 Existing Intersection Levels of Service

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Cedar Av. & I-10 Westbound Ramps	TS	1	2	0	0	3	1	0	0	0	0	1	1	30.3	19.4	C	B
2	Cedar Av. & I-10 Eastbound Ramps	TS	0	3	1	1	2	0	1	1	0	0	0	0	35.1	48.7	D	D
3	Cedar Av. & Orange St.	TS	1	2	0	1	2	1	1	1	0	0	1	0	17.8	15.8	B	B
4	Cedar Av. & Slover Av.	TS	1	2	0	1	2	0	1	2	d	1	2	0	30.9	32.2	C	C
5	Larch Av. & Slover Av.	TS	0	1	0	0	1	0	1	1	1	1	2	0	12.1	16.9	B	B
6	Driveway 1 & Slover Av.		Future Intersection															
7	Driveway 2 & Slover Av.		Future Intersection															
8	Cactus Av. & Slover Av.	CSS	0	1	0	0	0	0	0	2	0	0	2	0	11.5	15.0	B	C
9	Cactus Av. & Driveway 3		Future Intersection															
10	Cactus Av. & Driveway 4		Future Intersection															
11	Riverside Av. & I-10 WB Ramps	TS	2	3	0	0	4	1	0	0	0	1	1	1	21.2	17.6	C	B
12	Riverside Av. & I-10 EB Ramps	TS	0	3	0	2	2	0	1	1	1	0	0	0	24.7	29.1	C	C
13	Riverside Av. & Slover Av.	TS	1	2	0	1	2	0	1	2	0	1	2	0	43.0	41.3	D	D

[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

[2]Per the HCM (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3]TS = Traffic Signal; CSS = Cross-Street Stop

Source: (Urban Crossroads, 2019g, Table 3-1)

Table 4.12-6 Existing Freeway Mainline Levels of Service

Freeway	Direction[1]	Mainline Segment	Lanes[2]	Existing (2019)			
				Density[3]		LOS[4]	
				AM	PM	AM	PM
I-10	WB	West of Cedar Av.	4	34.4	**36.0**	D	**E**
		East of Cedar Av.	5	23.0	24.8	C	C
		East of Riverside Av.	4	31.1	**35.5**	D	**E**
	EB	West of Cedar Av.	5	21.2	21.2	C	C
		East of Cedar Av.	4	28.6	27.1	D	D
		East of Riverside Av.	4	30.7	27.5	D	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and are based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 3-3)

Table 4.12-7 Existing Freeway Ramp Queuing Summary

Intersection	Movement	Existing (2018)				
		Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Cedar Av. & I-10 Westbound Off-Ramp	WBR	480	222	234	Yes	Yes
	WBL/T/R	1,270	457[2]	281[2]	Yes	Yes
Cedar Av. & I-10 Eastbound Off-Ramp	EBL	340	411[2]	511[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	401[2]	433[2]	Yes	Yes
Riverside Av. & I-10 Westbound Off-Ramp	WBL	360	280	289	Yes	Yes
	WBL/T/R	1,190	230	283	Yes	Yes
	WBR	360	168	215	Yes	Yes
Riverside Av. & I-10 Eastbound Off-Ramp	EBL	1,190	238	366[2]	Yes	Yes
	EBL/T/R	1,190	181	382[2]	Yes	Yes
	EBR	350	167	237[2]	Yes	Yes

[1]Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
[2]95th percentile volume exceeds capacity, queue may be longer.
[3]Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.
Source: (Urban Crossroads, 2019g, Table 3-2)

Table 4.12-8 Existing Freeway Ramp Merge/Diverge Levels of Service

Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	Existing (2019)			
				AM Peak Hour		PM Peak Hour	
				Density[3]	LOS[4]	Density[3]	LOS[4]
I-10	WB	On-Ramp at Cedar Av.	4	30.2	D	29.3	D
		Off-Ramp at Cedar Av.	5	17.9	B	19.3	B
		Off-Ramp at Riverside Av.	4	22.1	C	24.2	C
	EB	Off-Ramp at Cedar Av.	5	15.7	B	16.1	B
		On-Ramp at Cedar Av.	4	27.5	C	26.9	C
		On-Ramp at Riverside Av.	4	27.3	C	25.6	C

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and is based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 3-4)

Table 4.12-9 Signalized Intersection LOS Thresholds

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F	F

Source: HCM 6th Edition, (Urban Crossroads, 2019g, Table 2-1)

Table 4.12-10 Unsignalized Intersection LOS Thresholds

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

Source: HCM 6th Edition, (Urban Crossroads, 2019g, Table 2-2)

Table 4.12-11 Freeway Mainline LOS Thresholds

Level of Service	Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow.	>45.0

[1]pc/mi/ln = passenger cars per mile per lane.
Source: HCM 6th Edition, (Urban Crossroads, 2019g, Table 2-4)

Table 4.12-12 Freeway Ramp Junction Merge/Diverge LOS Thresholds

Level of Service	Density Range (pc/mi/ln)[1]
A	≤10.0
B	10.0 – 20.0
C	20.0 – 28.0
D	28.0 – 35.0
E	>35.0
F	Demand Exceeds Capacity

[1]pc/mi/ln = passenger cars per mile per lane. Source: HCM
Source: (Urban Crossroads, 2019g, Table 2-5)

Table 4.12-13 Project Trip Generation Summary

Land Use	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Project Trip Generation Rates (PCE)[1]									
Warehouse[3,4]	TSF	150	0.131	0.039	0.170	0.051	0.139	0.190	1.740
Passenger Cars (80.00%)			0.105	0.031	0.136	0.041	0.111	0.152	1.392
2-Axle Trucks (3.34%) (PCE = 1.5)[5]			0.006	0.002	0.008	0.003	0.008	0.011	0.087
3-Axle Trucks (4.14%) (PCE = 2.0)[5]			0.010	0.004	0.014	0.004	0.012	0.016	0.144
4-Axle+ Trucks (12.52%) (PCE = 3.0)[5]			0.048	0.015	0.063	0.018	0.051	0.069	0.654

Project	Quantity	Units[2]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Project Trip Generation Summary (PCE)									
Slover & Cactus Warehouse	257.855	TSF							
Passenger Cars:			27	8	35	11	29	39	359
Truck Trips:									
2-axle:			2	0	2	1	2	3	22
3-axle:			3	1	4	1	3	4	37
4+-axle:			12	4	16	5	13	18	169
- Net Truck Trips (PCE)			*17*	*5*	*22*	*6*	*18*	*25*	*228*
TOTAL NET TRIPS (PCE)[6]			***44***	***13***	***57***	***17***	***47***	***64***	***587***

[1]Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).
[2]TSF = thousand square feet
[3]Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).
[4]Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014). Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks
[5]PCE rates are per San Bernardino County Transportation Authority (SBCTA).
[6]TOTAL NET TRIPS (PCE) = Passenger Cars + Net Truck Trips (PCE).
Source: (Urban Crossroads, 2019g, Table 4-1)

Table 4.12-14 Existing plus Project Intersection Analysis

#	Intersection	Traffic Control[2]	Existing (2019)				E+P			
			Delay[1] (secs.)		LOS		Delay[1] (secs.)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Cedar Av. & I-10 Westbound Ramps	TS	30.3	19.4	C	B	30.6	19.8	C	B
2	Cedar Av. & I-10 Eastbound Ramps	TS	35.1	48.7	D	D	35.6	48.9	D	D
3	Cedar Av. & Orange St.	TS	17.8	15.8	B	B	17.9	16.0	B	B
4	Cedar Av. & Slover Av.	TS	30.9	32.2	C	C	32.0	33.7	C	C
5	Larch Av. & Slover Av.	TS	12.1	16.9	B	B	12.2	17.1	B	B
6	Driveway 1 & Slover Av.	**CSS**	Future Intersection				10.1	12.2	B	B
7	Driveway 2 & Slover Av.	**CSS**	Future Intersection				9.6	11.6	A	B
8	Cactus Av. & Slover Av.	CSS	11.5	15.0	B	C	11.8	15.9	B	C
9	Cactus Av. & Driveway 3	**CSS**	Future Intersection				9.8	10.5	A	B
10	Cactus Av. & Driveway 4	**CSS**	Future Intersection				9.7	10.1	A	B
11	Riverside Av. & I-10 WB Ramps	TS	21.2	17.6	C	B	21.4	17.7	C	B
12	Riverside Av. & I-10 EB Ramps	TS	24.7	29.1	C	C	25.0	29.4	C	C
13	Riverside Av. & Slover Av.	TS	43.0	41.3	D	D	45.3	42.3	D	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes; [2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown; [3]TS = Traffic Signal; CSS = Cross-Street Stop; CSS = Improvement. Source: (Urban Crossroads, 2019g, Table 5-1)

Table 4.12-15 Existing plus Project Freeway Mainline Analysis

Freeway	Direction[1]	Mainline Segment	Lanes[2]	Existing (2019)				E+P			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
I-10	WB	West of Cedar Av.	4	34.4	**36.0**	D	E	34.5	**36.2**	D	E
		East of Cedar Av.	5	23.0	24.8	C	C	23.0	24.8	C	C
		East of Riverside Av.	4	31.1	**35.5**	D	E	31.1	**35.6**	D	E
	EB	West of Cedar Av.	5	21.2	21.2	C	C	21.3	21.2	C	C
		East of Cedar Av.	4	28.6	27.1	D	D	28.6	27.1	D	D
		East of Riverside Av.	4	30.7	27.5	D	D	30.7	27.7	D	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound; [2]Number of lanes are in the specified direction and are based on existing conditions; [3]Density is measured by passenger cars per mile per lane (pc/mi/ln); [4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 5-3)

Table 4.12-16 Existing plus Project Freeway Ramp Queuing Analysis

Intersection	Movement	Existing (2019)					E+P			
		Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable?[1]		95th Percentile Queue (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Cedar Av. & I-10 Westbound Off-Ramp	WBR	480	222	234	Yes	Yes	222	234	Yes	Yes
	WBL/T/R	1,270	457[2]	281[2]	Yes	Yes	457[2]	281[2]	Yes	Yes
Cedar Av. & I-10 Eastbound Off-Ramp	EBL	340	411[2]	511[2]	Yes[3]	Yes[3]	411[2]	523[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	401[2]	433[2]	Yes	Yes	431[2]	429[2]	Yes	Yes
Riverside Av. & I-10 Westbound Off-Ramp	WBL	360	280	289	Yes	Yes	285	293	Yes	Yes
	WBL/T/R	1,190	230	283	Yes	Yes	236	285	Yes	Yes
	WBR	360	168	215	Yes	Yes	168	215	Yes	Yes
Riverside Av. & I-10 Eastbound Off-Ramp	EBL	1,190	238	366[2]	Yes	Yes	238	366[2]	Yes	Yes
	EBL/T/R	1,190	181	382[2]	Yes	Yes	181	382[2]	Yes	Yes
	EBR	350	167	237[2]	Yes	Yes	167	238[2]	Yes	Yes

BOLD = Queue length exceeds available stacking distance.
[1]Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
[2]95th percentile volume exceeds capacity, queue may be longer.
[3]Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.
Source: (Urban Crossroads, 2019g, Table 5-2)

Table 4.12-17 Existing plus Project Freeway Ramp Merge/Diverge Analysis

Freeway	Direction[1]	Mainline Segment	Lanes[2]	Existing (2019)				E+P			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
I-10	WB	West of Cedar Av.	4	34.4	**36.0**	D	**E**	34.5	**36.2**	D	**E**
		East of Cedar Av.	5	23.0	24.8	C	C	23.0	24.8	C	C
		East of Riverside Av.	4	31.1	**35.5**	D	**E**	31.1	**35.6**	D	**E**
	EB	West of Cedar Av.	5	21.2	21.2	C	C	21.3	21.2	C	C
		East of Cedar Av.	4	28.6	27.1	D	D	28.6	27.1	D	D
		East of Riverside Av.	4	30.7	27.5	D	D	30.7	27.7	D	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and is based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 5-4)

Table 4.12-18 Opening Year (2020) Intersection Analysis

#	Intersection	Traffic Control[2]	2020 Without Project				2020 With Project			
			Delay[1] (secs.)		LOS		Delay[1] (secs.)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Cedar Av. & I-10 Westbound Ramps	TS	51.4	28.2	D	C	52.3	30.2	D	C
2	Cedar Av. & I-10 Eastbound Ramps	TS	48.1	**73.8**	D	**E**	49.5	**74.7**	D	**E**
3	Cedar Av. & Orange St.	TS	24.9	24.6	C	C	25.1	24.9	C	C
4	Cedar Av. & Slover Av.	TS	**57.3**	**70.9**	**E**	**E**	**57.8**	**73.6**	**E**	**E**
5	Larch Av. & Slover Av.	TS	12.2	17.6	B	B	12.3	17.8	B	B
6	Driveway 1 & Slover Av.	**CSS**	Future Intersection				10.4	12.5	B	B
7	Driveway 2 & Slover Av.	**CSS**	Future Intersection				9.8	12.0	A	B
8	Cactus Av. & Slover Av.	CSS	13.0	18.4	B	C	13.0	18.8	B	C
9	Cactus Av. & Driveway 3	**CSS**	Future Intersection				10.3	11.1	B	B
10	Cactus Av. & Driveway 4	**CSS**	Future Intersection				10.2	10.6	B	B
11	Riverside Av. & I-10 WB Ramps	TS	31.6	27.0	C	C	32.0	27.1	C	C
12	Riverside Av. & I-10 EB Ramps	TS	46.7	**67.6**	D	**E**	47.2	**69.2**	D	**E**
13	Riverside Av. & Slover Av.	TS	**131.9**	**112.7**	**F**	**F**	**135.1**	**113.9**	**F**	**F**

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes
[2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3]TS = Traffic Signal; CSS = Cross-Street Stop; CSS = Improvement
Source: (Urban Crossroads, 2019g, Table 6-1)

Table 4.12-19 Opening Year (2020) Freeway Mainline Analysis

Freeway	Direction[1]	Mainline Segment	Lanes[2]	2020 Without Project				2020 With Project			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
I-10	WB	West of Cedar Av.	4	**37.3**	**39.6**	**E**	**E**	**37.3**	**36.9**	**E**	**E**
		East of Cedar Av.	5	24.4	26.3	C	D	24.4	26.3	C	D
		East of Riverside Av.	4	34.0	**38.4**	D	**E**	34.1	**38.5**	D	**E**
	EB	West of Cedar Av.	5	22.8	22.3	C	C	22.9	22.4	C	C
		East of Cedar Av.	4	30.8	29.3	D	D	30.8	29.3	D	D
		East of Riverside Av.	4	33.0	30.2	D	D	33.0	30.3	D	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and are based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 6-3)

Table 4.12-20 Opening Year (2020) Freeway Ramp Queuing Analysis

Intersection	Movement	2020 Without Project					2020 With Project			
		Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable?[1]		95th Percentile Queue (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Cedar Av. & I-10 Westbound Off-Ramp	WBR	480	277[2]	349[2]	Yes	Yes	277[2]	349[2]	Yes	Yes
	WBL/T/R	1,270	667[2]	466[2]	Yes	Yes	667[2]	466[2]	Yes	Yes
Cedar Av. & I-10 Eastbound Off-Ramp	EBL	340	563[2]	674[2]	Yes[3]	Yes[3]	563[2]	687[2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	622[2]	596[2]	Yes	Yes	653[2]	595[2]	Yes	Yes
Riverside Av. & I-10 Westbound Off-Ramp	WBL	360	469[2]	406[2]	Yes[3]	Yes[3]	476[2]	411[2]	Yes[3]	Yes[3]
	WBL/T/R	1,190	407[2]	421[2]	Yes	Yes	415[2]	425[2]	Yes	Yes
	WBR	360	338[2]	306[2]	Yes	Yes	338[2]	306[2]	Yes	Yes
Riverside Av. & I-10 Eastbound Off-Ramp	EBL	1,190	452[2]	484[2]	Yes	Yes	452[2]	484[2]	Yes	Yes
	EBL/T/R	1,190	394[2]	487[2]	Yes	Yes	394[2]	487[2]	Yes	Yes
	EBR	350	368[2]	355[2]	Yes[3]	Yes[3]	368[2]	355[2]	Yes[3]	Yes[3]

BOLD = Queue length exceeds available stacking distance.
[1]Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
[2]95th percentile volume exceeds capacity, queue may be longer.
[3]Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.
Source: (Urban Crossroads, 2019g, Table 6-2)

Table 4.12-21 Opening Year (2020) Freeway Ramp Merge/Diverge Junctions

Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	2020 Without Project				2020 With Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[3]	LOS[4]	Density[3]	LOS[4]	Density[3]	LOS[4]	Density[3]	LOS[4]
I-10	WB	On-Ramp at Cedar Av.	4	32.0	D	32.1	D	32.0	D	32.2	D
		Off-Ramp at Cedar Av.	5	19.8	B	21.3	C	19.8	B	21.3	C
		Off-Ramp at Riverside Av.	4	25.2	C	26.4	C	25.2	C	26.4	C
	EB	Off-Ramp at Cedar Av.	5	19.8	B	19.8	B	19.9	B	19.8	B
		On-Ramp at Cedar Av.	4	29.5	D	29.2	D	29.5	D	29.2	D
		On-Ramp at Riverside Av.	4	29.3	D	28.6	D	29.3	D	28.7	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and is based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
Source: (Urban Crossroads, 2019g, Table 6-4)

Table 4.12-22 Horizon Year (2040) Intersection Analysis

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project			
			Delay[1] (secs.)		LOS		Delay[1] (secs.)		LOS	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Cedar Av. & I-10 Westbound Ramps	TS	**72.4**	45.3	E	D	**73.2**	47.9	F	D
2	Cedar Av. & I-10 Eastbound Ramps	TS	**70.6**	**119.5**	E	F	**72.1**	**121.6**	E	F
3	Cedar Av. & Orange St.	TS	34.9	30.8	C	C	35.4	31.4	D	C
4	Cedar Av. & Slover Av.	TS	**66.9**	**83.9**	E	F	**71.5**	**88.5**	E	F
5	Larch Av. & Slover Av.	TS	11.9	22.0	B	C	12.1	22.3	B	C
6	Driveway 1 & Slover Av.	**CSS**	Future Intersection				10.9	15.0	B	C
7	Driveway 2 & Slover Av.	**CSS**	Future Intersection				10.2	13.9	B	B
8	Cactus Av. & Slover Av.	CSS	13.3	**63.6**	B	F	13.7	**79.9**	B	F
9	Cactus Av. & Driveway 3	**CSS**	Future Intersection				11.0	12.1	B	B
10	Cactus Av. & Driveway 4	**CSS**	Future Intersection				10.9	11.4	B	B
11	Riverside Av. & I-10 WB Ramps	TS	41.3	38.6	D	D	41.7	38.8	D	D
12	Riverside Av. & I-10 EB Ramps	TS	**71.0**	**129.9**	E	F	**71.6**	**131.6**	E	F
13	Riverside Av. & Slover Av.	TS	**168.3**	**167.8**	F	F	**171.4**	**169.3**	F	F

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
[2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3]TS = Traffic Signal; CSS = Cross-Street Stop; CSS = Improvement
Source: (Urban Crossroads, 2019g, Table 7-1)

Table 4.12-23 Horizon Year (2040) Freeway Mainline Analysis

Freeway	Direction[1]	Mainline Segment	Lanes[2]	2040 Without Project				2040 With Project			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
I-10	WB	West of Cedar Av.	4	**41.8**	**43.3**	**E**	**E**	**41.8**	**43.5**	**E**	**E**
		East of Cedar Av.	5	25.9	27.9	C	D	25.9	27.9	C	D
		East of Riverside Av.	4	**36.1**	**41.0**	**E**	**E**	**36.2**	**41.1**	**E**	**E**
	EB	West of Cedar Av.	5	26.4	25.0	D	C	26.5	25.0	D	C
		East of Cedar Av.	4	**38.4**	33.6	**E**	D	**38.4**	33.6	**E**	D
		East of Riverside Av.	4	**41.5**	**35.7**	**E**	**E**	**41.6**	**35.8**	**E**	**E**

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and are based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
[5]HCS7 does not report density for freeway facilities operating at LOS F.
Source: (Urban Crossroads, 2019g, Table 7-3)

Table 4.12-24 Horizon Year (2040) Freeway Ramp Queuing Analysis

Intersection	Movement	2040 Without Project					2040 With Project			
		Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable?[1]		95th Percentile Queue (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Cedar Av. & I-10 Westbound Off-Ramp	WBR	480	361 [2]	460 [2]	Yes	Yes	361 [2]	460 [2]	Yes	Yes
	WBL/T/R	1,270	750 [2]	557 [2]	Yes	Yes	750 [2]	557 [2]	Yes	Yes
Cedar Av. & I-10 Eastbound Off-Ramp	EBL	340	554 [2]	809 [2]	Yes[3]	Yes[3]	554 [2]	809 [2]	Yes[3]	Yes[3]
	EBL/T/R	1,900	705 [2]	736 [2]	Yes	Yes	735 [2]	745 [2]	Yes	Yes
Riverside Av. & I-10 Westbound Off-Ramp	WBL	360	502 [2]	476 [2]	Yes[3]	Yes[3]	511 [2]	483 [2]	Yes[3]	Yes[3]
	WBL/T/R	1,190	445 [2]	502 [2]	Yes	Yes	446 [2]	506 [2]	Yes	Yes
	WBR	360	376 [2]	367 [2]	Yes[3]	Yes[3]	385 [2]	367 [2]	Yes[3]	Yes[3]
Riverside Av. & I-10 Eastbound Off-Ramp	EBL	1,190	523 [2]	551	Yes	Yes	523 [2]	551 [2]	Yes	Yes
	EBL/T/R	1,190	454 [2]	549	Yes	Yes	454 [2]	550 [2]	Yes	Yes
	EBR	350	427 [2]	422 [2]	Yes[3]	Yes[3]	427 [2]	422 [2]	Yes[3]	Yes[3]

[1]Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.
[2]95th percentile volume exceeds capacity, queue may be longer.
[3]Although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.
Source: (Urban Crossroads, 2019g, Table 7-2)

Table 4.12-25 Horizon Year (2040) Freeway Ramp Merge/Diverge Junctions

Freeway	Direction[1]	Ramp or Segment	Lanes on Freeway[2]	2040 Without Project				With Project			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[3]	LOS[4]	Density[3]	LOS[4]	Density[3]	LOS[4]	Density[3]	LOS[4]
I-10	WB	On-Ramp at Cedar Av.	4	35.0	D	33.8	D	**35.1**	**E**	34.0	D
		Off-Ramp at Cedar Av.	5	22.2	C	23.4	C	22.2	C	23.4	C
		Off-Ramp at Riverside Av.	4	27.5	C	29.0	D	27.6	C	29.0	D
	EB	Off-Ramp at Cedar Av.	5	19.4	B	20.4	C	19.5	B	20.4	C
		On-Ramp at Cedar Av.	4	**39.2**	**F**	**36.9**	**F**	**39.2**	**F**	**36.9**	**F**
		On-Ramp at Riverside Av.	4	**35.1**	**E**	32.8	D	**35.1**	**E**	33.0	D

BOLD = Unacceptable Level of Service
[1]EB = Eastbound; WB = Westbound
[2]Number of lanes are in the specified direction and is based on existing conditions.
[3]Density is measured by passenger cars per mile per lane (pc/mi/ln).
[4]LOS = Level of Service
[5]HCS7 does not report density for freeway facilities operating at LOS F.
Source: (Urban Crossroads, 2019g, Table 7-4)

Table 4.12-26 Opening Year (2020) Intersection Analysis – With Mitigation

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
2	Cedar Av. & I-10 Eastbound Ramps																	
	- Without Project	TS	0	3	1	1	2	0	1	1	**1**	0	0	0	24.9	44.2	C	D
	- With Project	TS	0	3	1	1	2	0	1	1	**1**	0	0	0	25.3	44.4	C	D
4	Cedar Av. & Slover Av.																	
	- Without Project	TS	1	2	0	1	2	0	**2**	2	**0**	1	2	0	36.1	42.1	D	D
	- With Project	TS	1	2	0	1	2	0	**2**	2	**0**	1	2	0	38.7	44.8	D	D
12	Riverside Av. & I-10 EB Ramps																	
	- Without Project	TS	0	3	**1**	2	2	0	1	1	1	0	0	0	35.2	35.5	D	D
	- With Project	TS	0	3	**1**	2	2	0	1	1	1	0	0	0	35.5	35.6	D	D
13	Riverside Av. & Slover Av.																	
	- Without Project[4]	TS	1	2	0	1	2	**1**	**2**	2	0	1	2	0	44.4	41.1	D	D
	- With Project[4]	TS	1	2	0	1	2	**1**	**2**	2	0	1	2	0	45.1	42.2	D	D

[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right
turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; 1 = Improvement
[2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[3]TS = Traffic Signal; TS = Improvement
Source: (Urban Crossroads, 2019g, Table 6-5)

Table 4.12-27 Horizon Year (2040) Intersection Analysis – With Mitigation

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Cedar Av. & I-10 Westbound Ramps																	
	- Without Project[4]	TS	**2**	2	0	0	3	1	0	0	0	0	1	1	44.7	31.3	D	C
	- With Project[4]	TS	**2**	2	0	0	3	1	0	0	0	0	1	1	45.1	31.8	D	C
2	Cedar Av. & I-10 Eastbound Ramps																	
	- Without Project[4]	TS	0	3	1	**2**	2	0	1	1	**1**	0	0	0	24.4	34.9	C	C
	- With Project[4]	TS	0	3	1	**2**	2	0	1	1	**1**	0	0	0	24.6	35.1	C	D
4	Cedar Av. & Slover Av.																	
	- Without Project	TS	1	2	0	1	2	**1**	**2**	2	**0**	1	2	**1**	43.8	54.1	D	D
	- With Project	TS	1	2	0	1	2	**1**	**2**	2	**0**	1	2	**1**	45.9	54.8	D	D
8	Cactus Av. & Slover Av.																	
	- Without Project	**TS**	0	1	0	0	0	0	0	2	0	**1**	2	0	12.2	14.5	B	B
	- With Project	**TS**	0	1	0	0	0	0	0	2	0	**1**	2	0	20.1	15.2	C	B
12	Riverside Av. & I-10 EB Ramps																	
	- Without Project	TS	0	3	**1**	2	2	0	1	1	1	0	0	0	50.0	52.6	D	D
	- With Project	TS	0	3	**1**	2	2	0	1	1	1	0	0	0	50.2	53.2	D	D
13	Riverside Av. & Slover Av.																	
	- Without Project	TS	1	**3**	0	1	2	**1**	**2**	2	0	1	2	0	53.4	49.7	D	D
	- With Project	TS	1	**3**	0	1	2	**1**	**2**	2	0	1	2	0	54.0	52.1	D	D

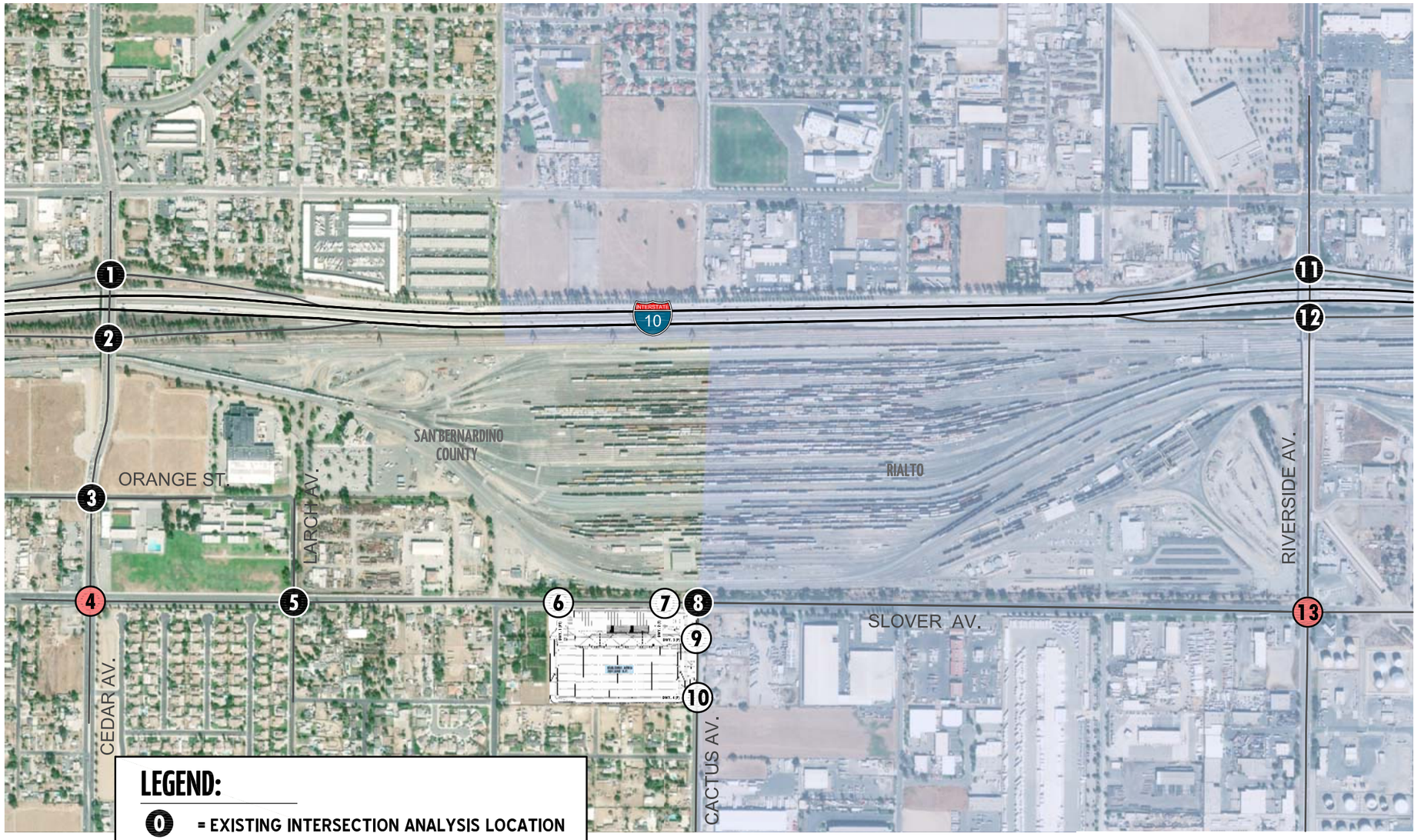
[1]When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right
turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; 1 = Improvement

[2]Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3]AWS = All-Way Stop; TS = Traffic Signal; TS = Improvement

[4]Modify traffic signal timing to accommodate a 120-second cycle length during the AM and PM peak hours. Modifications include adjusting the cycle length at all other intersections within the SBCTA coordinated system.

Source: (Urban Crossroads, 2019g, Table 7-5)

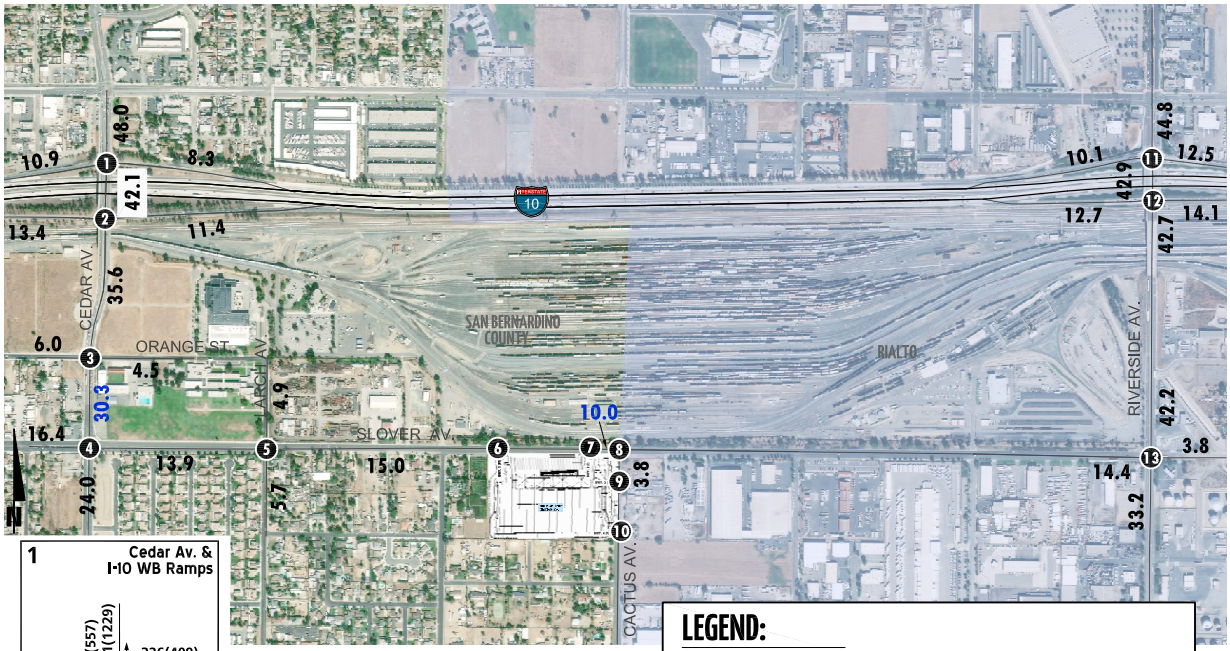


Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-1

Not to Scale

Study Area Intersection Locations



Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-2

Not to Scale

Existing Average Daily Traffic (PCE)

LEGEND:

⟵ 100/200 = AM/PM PEAK HOUR VOLUMES

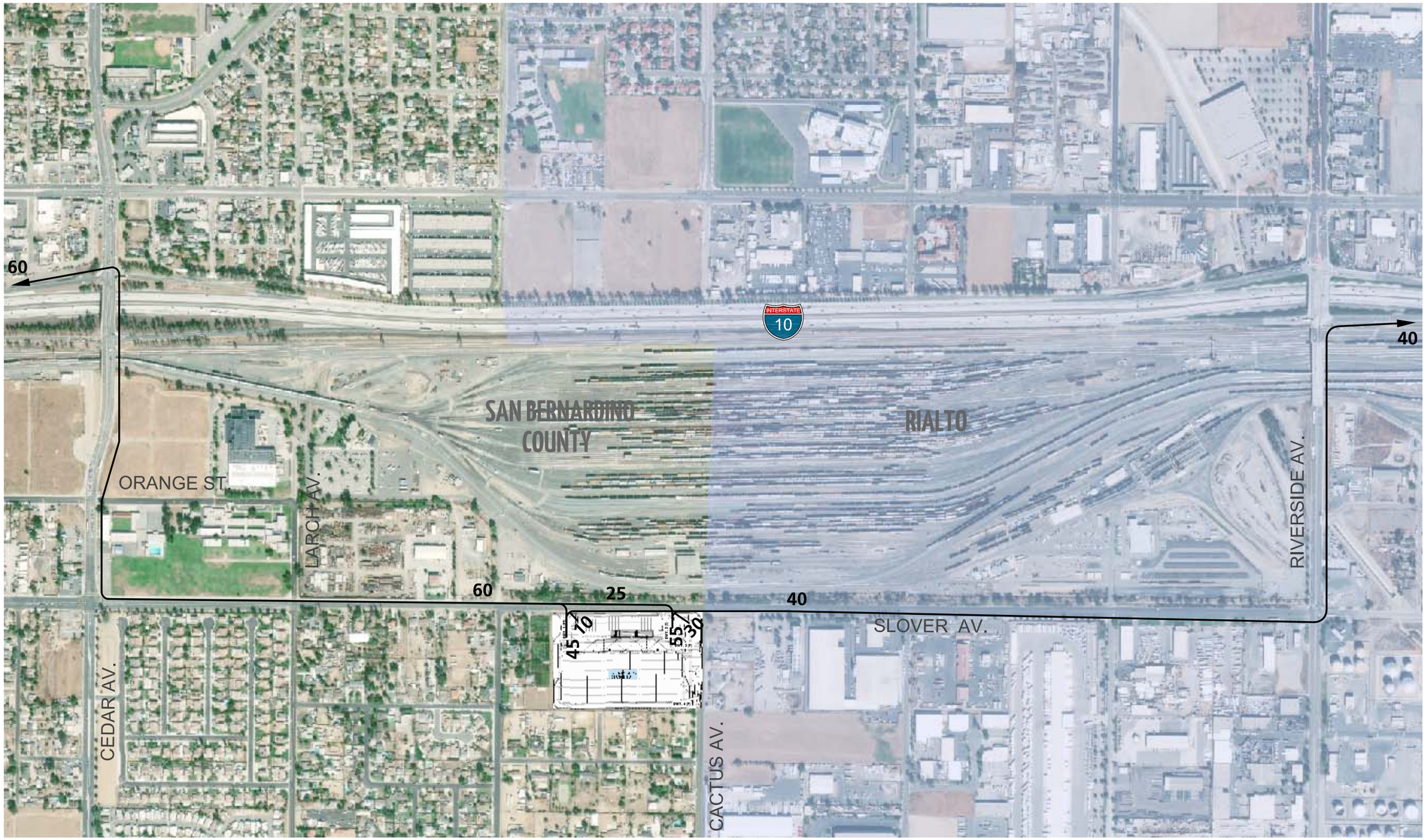
NOTE: VOLUMES IN ACTUAL VEHICLES (NOT PCE)

Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-3

Not to Scale

Existing Freeway Mainline Volumes

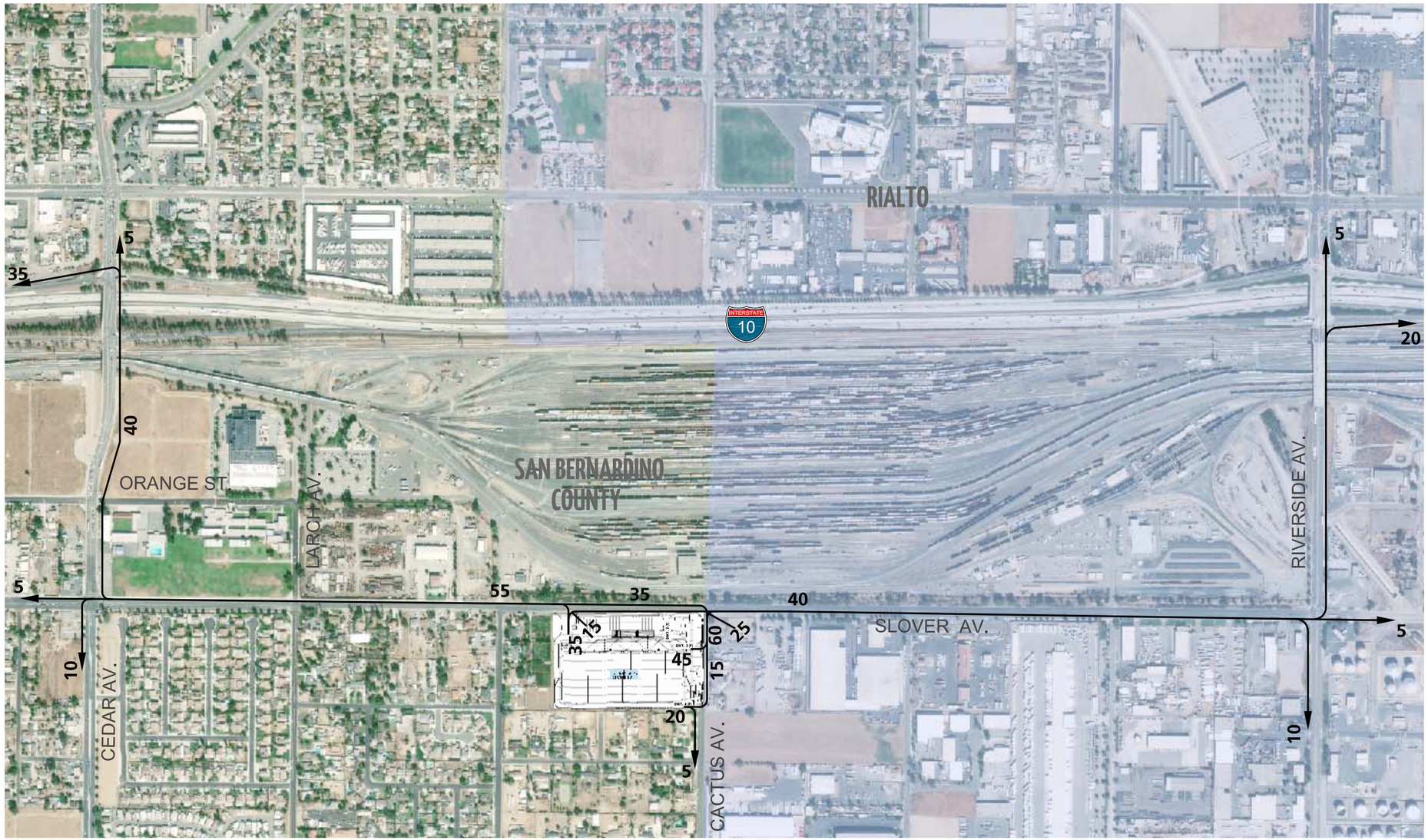


Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-4

Not to Scale

Project Truck Trip Distribution



LEGEND:

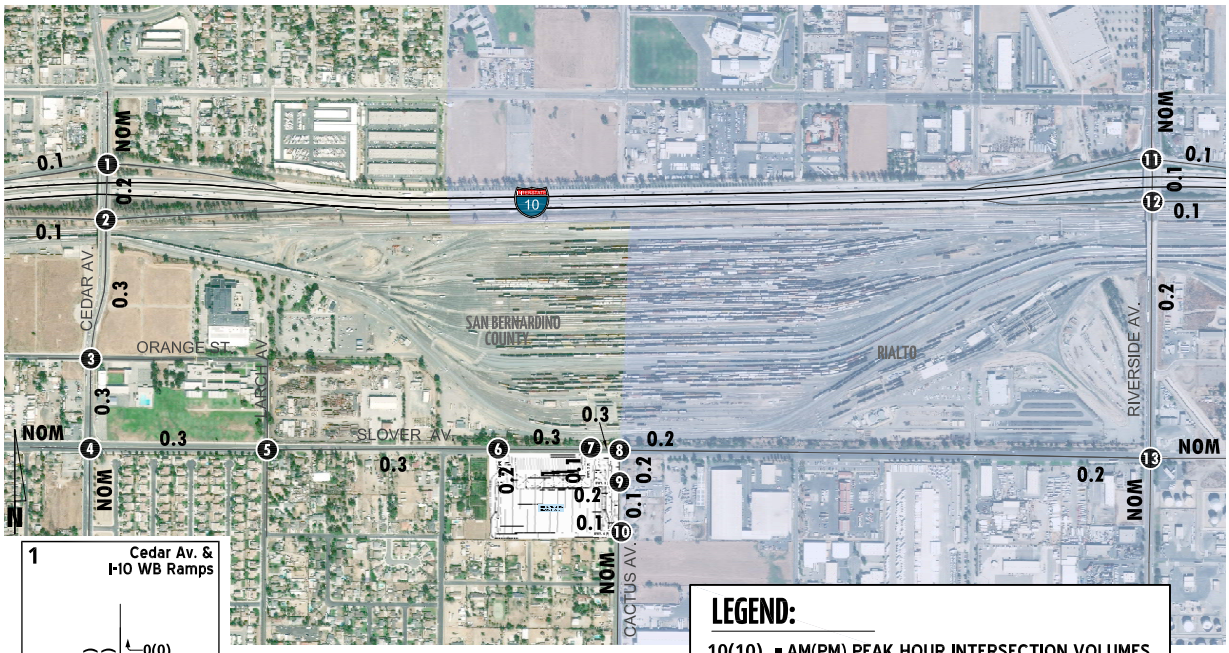
10 = PERCENT TO/FROM PROJECT

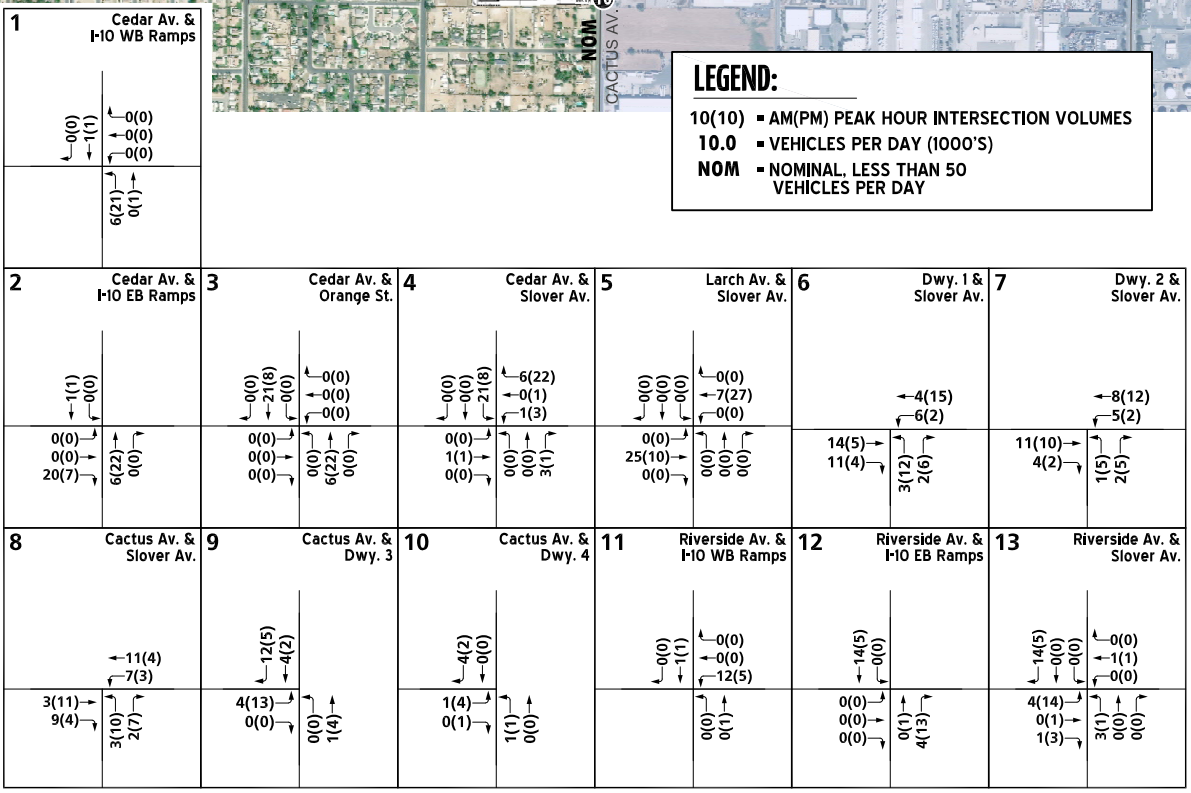
Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-5

Not to Scale

Project Passenger Car Trip Distribution





LEGEND:

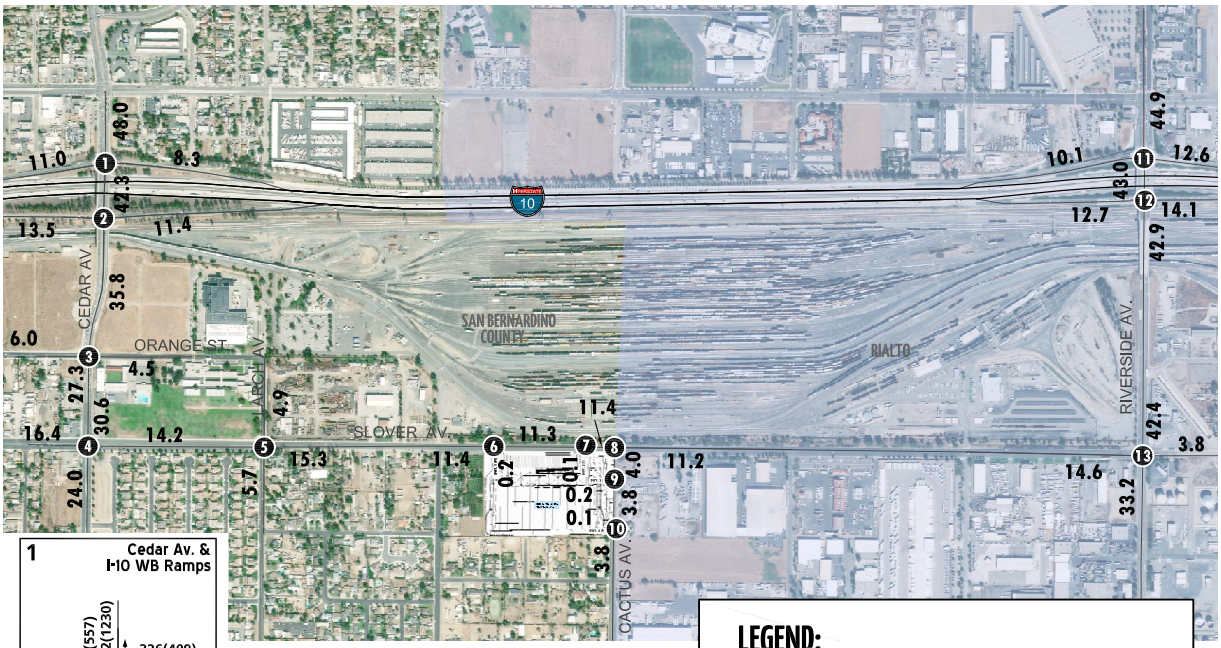
10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-6

Not to Scale

Project Average Daily Traffic



LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0 = VEHICLES PER DAY (1000'S)

1 Cedar Av. & I-10 WB Ramps

812(557) 1432(1230) 326(409) 13(4) 365(232)
343(302) 1206(1528)

2 Cedar Av. & I-10 EB Ramps

1354(1008) 443(454)
453(763) 4(1) 382(283)
1095(1068) 434(430)

3 Cedar Av. & Orange St.

456(240) 1172(1004) 109(46) 91(245) 1(2) 1(3)
294(158) 6(49) 21(10)
1(8) 1144(1095) 7(2)

4 Cedar Av. & Slover Av.

110(94) 955(784) 129(139) 134(125) 156(264) 15(38)
189(225) 128(473) 39(130)
74(86) 829(756) 35(72)

5 Larch Av. & Slover Av.

4(29) 34(44) 39(52) 32(70) 255(345) 39(61)
5(37) 240(593) 47(54)
45(54) 54(149) 24(79)

6 Dwy. 1 & Slover Av.

225(392) 6(2)
246(489) 11(4)
3(12) 2(6)

7 Dwy. 2 & Slover Av.

229(389) 5(2)
243(494) 4(2)
1(5) 2(5)

8 Cactus Av. & Slover Av.

178(289) 78(75)
185(437) 59(62)
57(102) 31(76)

9 Cactus Av. & Dwy. 3

12(5) 125(132)
4(13) 0(0)
0(0) 84(165)

10 Cactus Av. & Dwy. 4

4(2) 121(130)
1(4) 0(1)
1(1) 83(161)

11 Riverside Av. & I-10 WB Ramps

583(430) 1243(1052) 353(522) 0(2) 606(454)
400(355) 823(1479)

12 Riverside Av. & I-10 EB Ramps

1324(1083) 527(421)
313(624) 0(3) 429(362)
910(1210) 591(680)

13 Riverside Av. & Slover Av.

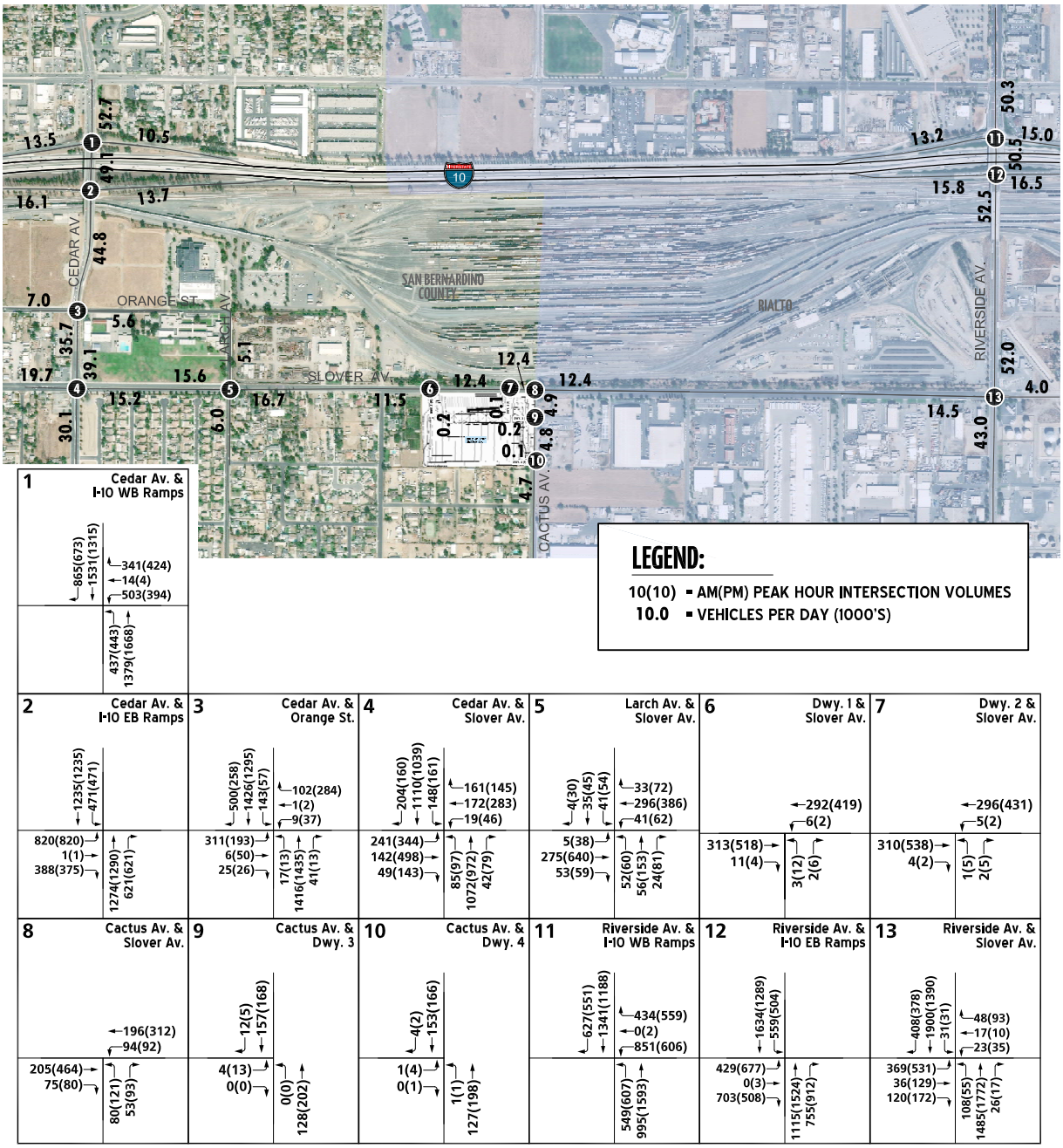
374(342) 1362(1078) 20(26) 44(82) 17(10) 23(35)
328(493) 35(127) 87(147)
81(26) 1160(1276) 26(17)

Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-7

Not to Scale

Existing plus Project Average Daily Traffic

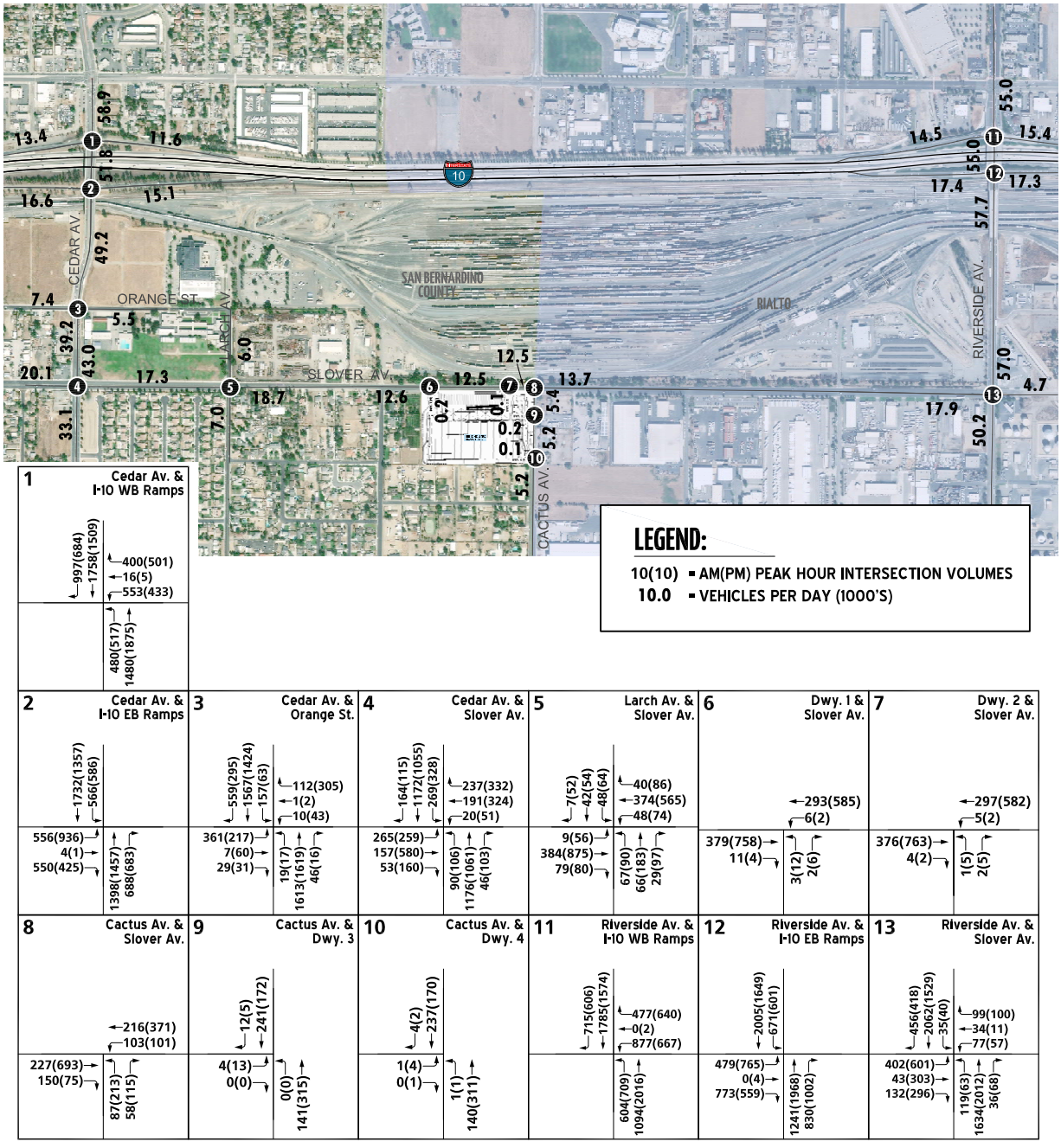


Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-8

Not to Scale

Opening Year (2020) Average Daily Traffic



Source(s): Urban Crossroads (05-16-2019)

Figure 4.12-9

Not to Scale

Horizon Year (2040) Average Daily Traffic

4.13 TRIBAL CULTURAL RESOURCES

The information and analysis presented in this Subsection is based, in part, on a site-specific report that was prepared for the Project site by L&L Environmental, Inc. (hereafter, "L&L"), titled "Phase I Cultural Resources Assessment for the Slover and Cactus Avenue Warehouse Project," dated June 14, 2018, and included as *Technical Appendix D* to this EIR (L&L, 2018b).

All references used in this Subsection are included in EIR Section 7.0, *References*. Confidential information has been redacted from *Technical Appendix D* for purposes of public review. In addition, much of the written and oral communication between Native American tribes, the County of San Bernardino, and L&L 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)).

4.13.1 EXISTING CONDITIONS

Refer to Subsection 4.4, *Cultural Resources*, for the prehistorical period regional setting for the Project site.

A. Prehistoric Resources

1. Project Site Conditions

L&L conducted an intensive pedestrian survey of the Project site on April 4, 2018. The pedestrian survey consisted of a series of north-south tending transects, spaced at approximately 10-meter intervals, which covered the entire Project site. No prehistoric resource sites or isolates were identified on the Project site during the pedestrian survey. (L&L, 2018b, p. 40)

L&L also reviewed an archaeological records search conducted by the South Central Coastal Information Center (SCCIC) at California State University (CSU), Fullerton. The records search provided information regarding previous archaeological studies in the Project area and any previously recorded sites within a one-mile radius of the Project site. The results of this records search indicate that two (2) prehistoric sites are located within a one-mile radius of the site, and no prehistoric artifacts have been previously recorded on the Project site (L&L, 2018b, p. 25).

4.13.2 Applicable Environmental Plans, Policies, and Regulations

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

A. *State Plans, Policies, and Regulations*

1. 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)

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government. (OPR, 2005)

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code § 65300 *et seq.*) and specific plans (defined in Government Code § 65450 *et seq.*). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code § 65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. (OPR, 2005)

2. Assembly Bill 52 (AB 52)

California Assembly Bill 52 (AB 52) Chapter 532 is an act to amend § 5097.94 of, and add §§ 21073, 21074, The legislature added new requirements regarding tribal cultural resources in Assembly Bill 52 (AB 52). By including tribal cultural resources 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 tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. (OPR, 2015)

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.) (Pub. Resources Code, § 21080.3.1.) (OPR, 2015)

If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code § 20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources. 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, 2015)

Section (§) 21074 of the Public Resources Code 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, 2015)

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, 2015)

4.13.3 Basis for Determining Significance

The proposed Project would result in a significant impact to tribal cultural resources 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:

i. 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

ii. 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 shall consider the significance of the resource to a California Native American tribe.

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects related to tribal cultural resources that could result from development projects.

4.13.4 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:***
	i. 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
	ii. 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 shall consider the significance of the resource to a California Native American tribe.

A Sacred Lands File (SLF) search from the NAHC did not indicate the presence of a tribal cultural resource on or near the Project site; however, as part of the SB 18 and AB 52 consultation processes required by State law, the County of San Bernardino sent notification of the Project to the following Native American tribes with possible traditional or cultural affiliation to the area: Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Gabrieleno Band of Mission Indians – Kizh Nation, Garbieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, Los Coyotes Band of Mission Indians, Morongo Band of Mission Indians, Pauma Band of Luiseno Indians – Pauma & Yulma Reservation, Ramona Band of Cahuilla Mission Indians, San Fernando Band of Mission Indians, San Manuel Band of Mission Indians, Santa Rosa Band of Mission Indians, Serrano Nation of Mission Indians, Soboba Band of Luiseno Indians, and Torres-Martinez Desert Cahuilla Indians. (L&L, 2018b, pp. 35-38)

The County received from the following three (3) tribes: Agua Caliente Band of Cahuilla Indians (ACBCI), Morongo Band of Mission Indians (MBMI), and Soboba Band. The ACBCI indicated that the Project is not located within the tribe's Traditional Use Area (TUA); however, the MBMI and Soboba Band stated that the Project site is culturally sensitive and is located within both of the tribe's TUA; therefore, there is the potential for tribal cultural resources to be uncovered during construction of the Project site. (L&L, 2018b, p. 35)

As discussed previously in Subsection 4.13.1A.1, no prehistoric resource sites or isolates were identified on the Project site during the pedestrian survey (L&L, 2018b, p. 40). Although the Project

would not impact any known tribal cultural resources, there is the remote potential that tribal cultural resources are buried beneath the surface of the property and could be impacted during construction. Therefore, there is a possibility for a tribal cultural resource to be encountered during construction, which would require mitigation.

4.13.5 Cumulative Impact Analysis

The Project's potential to result in cumulatively-considerable impacts to tribal, religious, and cultural resources were analyzed in conjunction with other projects located in the influence areas of the tribes in the region. Two (2) Native American tribes stated that there is potential for tribal cultural resources to be uncovered during construction on the Project site. These two (2) Native American tribes have a traditional use area that encompasses the County of San Bernardino, and other development projects within the County of San Bernardino would have a similar potential to uncover tribal cultural resources. Therefore, the potential for the Project to impact tribal cultural resources is a cumulatively-considerable impact for which mitigation is required.

4.13.6 Significance of Impacts Before Mitigation

Threshold a: Significant Direct and Cumulatively-Considerable Impact. The Project site does not contain any recorded Native American cultural resources; therefore, the Project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources. Nonetheless, construction activities on the Project site have the potential, however unlikely, to unearth and adversely impact tribal cultural resources that may be buried beneath the ground surface.

4.13.7 Mitigation

The following mitigation measures would reduce the Project's potential impact to significant tribal cultural resources that may be present beneath the Project site and may be discovered during ground-disturbing construction activities.

MM 4.13-1 Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the County of San Bernardino that a professional archaeologist (hereafter "Project Archaeologist") has been retained to conduct monitoring of all mass grading activities. The Project Archaeologist shall have the authority to redirect earthmoving activities in the event that suspected tribal cultural resources are unearthed during Project construction.

MM 4.13-2 Prior to the issuance of a grading permit, the Project Applicant shall provide evidence to the County of San Bernardino that the Native American Tribe(s) that requested consultation with the County during the SB 18 and AB 52 processes (hereafter referred to as "Native American Tribal Representatives") received a minimum of 30 days' advance notice of all mass grading and trenching activities. The Native American Tribal Representatives also shall be notified of and allowed to attend the

pre-grading meeting with the County and Project construction contractors and/or monitor all Project mass grading and trenching activities. In the event that suspected tribal cultural resources are unearthed, the Native American Tribal Representatives shall have the authority to redirect earth moving activities in the affected area.

MM 4.13-3 Prior to the issuance of a grading permit, the Project Applicant or construction contractor shall provide evidence to the County of San Bernardino that the construction site supervisors and crew members involved with grading and trenching operations have received training by the Project Archaeologist to recognize archaeological and tribal cultural resources should such resources be unearthed during ground-disturbing construction activities. Any Native American Tribal Representatives shall be allowed to attend the training session. The training will include a brief review of the cultural sensitivity of the Project site and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel involved with grading and trenching operations that begin work on the Project site following the initial training session must take the training prior to beginning work on the Project site and the Project archaeologist and monitoring Native American Tribe(s) shall make themselves available to provide the training on an as-needed basis.

MM 4.13-4 If a suspected significant tribal cultural resource is identified on the property, the construction supervisor shall be required by his contract to immediately halt and redirect grading operations in a 100-foot radius around the find and seek identification and evaluation of the suspected resource by the Project Archaeologist and the Native American Tribal Representative. This requirement shall be noted on all grading plans and the construction contractor shall be obligated to comply with the note. In consultation with the Native American Tribal Representatives, the Project Archaeologist shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section § 15064.5 and Section 21083.2. If the resource is significant, Mitigation Measure MM 4.13-5 shall apply.

MM 4.13-5 If a significant tribal cultural resource is discovered on the property, ground disturbing activities shall be suspended 50 feet around the resource until a treatment plan is implemented. A treatment plan shall be prepared and implemented, subject to approval by the County of San Bernardino, to protect the identified resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The

research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological or tribal cultural resource(s) in accordance with current professional archaeology standards. The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery and shall require that all recovered artifacts undergo basic field analysis and documentation or laboratory analysis, whichever is appropriate. At the completion of the basic field analysis and documentation or laboratory analysis, any recovered resource(s) shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the County of San Bernardino. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the County of San Bernardino, the South Central Coastal Information Center (SCCIC) at California State University (CSU), Fullerton, and the appropriate Native American Tribe(s).

4.13.8 Significance of Impacts After Mitigation

Threshold a: Less-than-Significant with Mitigation Incorporated. Implementation of MM 4.13-1 through MM 4.13-5 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 development. With implementation of the required mitigation, the Project's potential impact to significant tribal cultural resources would be reduced to less-than-significant.

4.14 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. A complete list of references used in the analysis in this Subsection can be found in EIR Section 7.0, *References.*

4.14.1 EXISTING CONDITIONS

A. Water Service

Domestic water service is provided to the Project area by the West Valley Water District (WVWD). WVWD's water service area is approximately 31 square miles and serves a population of 80,161 across portions of the cities of Rialto, Fontana, Colton, and Jurupa Valley, and unincorporated areas of San Bernardino County (including the community of Bloomington, within which the Project site is located). (WSC, 2017, p. 11-1) An existing 18-inch-diameter water line is located beneath Slover Avenue (abutting the Project site on the north) and an existing 12-inch-diameter line is located beneath Cactus Avenue (abutting the Project site on the east).

Under existing conditions, the Project site contains four (4) residences that receive water from WVWD for indoor (domestic) and outdoor (irrigation). Although the existing uses on the Project site consume water under existing conditions, for purposes of the analysis in this Subsection (and in order to present a "worst-case" scenario) all water used by the Project is considered to represent a "new" demand and no deduction is taken for the elimination of any uses on the Project site that consume water.

B. Wastewater Service

Wastewater treatment service to the Project area is provided by the City of Rialto (via the Rialto Wastewater Treatment Plant). The Rialto Wastewater Treatment Plant has a treatment capacity of 12 million gallons per day (MGD) and a current treatment flow of 8 MGD. (WSC, 2017, p. 11-13) An existing 12-inch-diameter sewer line beneath Slover Avenue conveys wastewater flows in the Project area to the Rialto Wastewater Treatment Plant.

Under existing conditions, the Project site contains four (4) residences that receive wastewater treatment from the Rialto Wastewater Treatment Plant. Although the existing uses on the Project site receive wastewater treatment services under existing conditions, for purposes of the analysis in this Subsection (and in order to present a "worst-case" scenario) all wastewater produced by the Project is considered to represent a "new" wastewater treatment demand and no deduction is taken for the elimination of any uses on the Project site that generate wastewater.

C. *Stormwater Conveyance Facilities*

There is no public stormwater drainage system in the vicinity of the Project site; stormwater runoff is conveyed downstream as aboveground flow via the existing curb and gutter system along Slover Avenue and Cactus Avenue.

D. *Solid Waste Collection and Disposal*

Solid waste from the Project site is expected to be disposed at the Mid-Valley Landfill and/or the San Timoteo Landfill. The Mid-Valley Landfill, located in Rialto, is permitted to receive 7,500 tons of solid waste per day and has a remaining disposal capacity of 67,520,000 cubic yards (CalRecycle, 2019a). In February 2019, the peak daily disposal at the Mid-Valley Landfill was 5,330 tons (CalRecycle, 2019b). The San Timoteo Landfill, located in Redlands, is permitted to receive 2,000 tons per day and has a remaining disposal capacity of 11,402,000 cubic yards (CalRecycle, 2019c). In February 2019, the peak daily disposal at the San Timoteo Landfill was less than its permitted capacity (i.e., 2,000 tons); the average daily waste disposal at the San Timoteo Landfill is 977 tons (CalRecycle, 2019d; CalRecycle, 2019e).

Under existing conditions, the Project site contains four (4) residences that produce solid waste requiring disposal. Although the existing uses on the Project site generate solid waste under existing conditions, for purposes of analysis in this Subsection (and in order to present a "worst-case" scenario) all solid waste produced by the Project is considered to represent a "new" demand for solid waste disposal services and no deduction is taken for the elimination of any uses on the Project site that generate solid waste.

4.14.2 Applicable Environmental Plans, Policies, and Regulations

The following is a brief description of the federal, State, and local environmental laws, regulations, and plans related to utilities and service systems.

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 significantly 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, 2017a)

2. 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, 2017f)

B. State Plans, Policies, and Regulations

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

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of 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 Storm Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (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 implements many provisions of the Clean Water Act, such as the NPDES permitting program. The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and get updated as necessary and practical. These plans identify 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. (SWRCB, 2014) The Project site and vicinity are located in the Santa Ana River Watershed, which is within the purview of the Santa Ana RWQCB. The Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan is the governing water quality plan for the region.

2. California Water Code

The California Water Code is the principal state law regulating water quality in California. Water quality provisions must be complied with as contained in numerous code sections including: 1) the Health and Safety Code for the protection of ground and surface waters from hazardous waste and other toxic substances; 2) the Fish and Game Code for the prevention of unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life; 3) the Harbors and Navigation Code for the prevention of the unauthorized discharge of waste from vessels into surface waters; and 4) the Food and Agriculture Code for the protection of groundwater which may be used for drinking water supplies. The California Department of Fish and Wildlife (CDFW), through provisions of the Fish & Game Code (§§ 1601 - 1603) is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFW.

Surface water quality is the responsibility of the applicable RWQCB, water supply and wastewater treatment agencies, and city and county governments. The principal means of enforcement by the RWQCB is through the development, adoption, and issuance of water discharge permits. RWQCB basin plans establish water quality objectives that are defined as the limits or levels of water quality constituents or characteristics for the reasonable protection of beneficial uses of water.

3. California Toxics Rule (CTR)

The California Toxics Rule (CTR) fills gap in California's water quality standards necessary to protect human health and aquatic life beneficial uses. The CTR criteria are similar to those published in the National Recommended Water Quality Criteria. The CTR supplements, and does not change or supersede, the criteria that EPA promulgated for California waters in the National Toxics Rule (NTR). The human health NTR and CTR criteria that apply to drinking water sources (those water bodies designated in the Basin Plans as municipal and domestic supply) consider chemical exposure through consumption of both water and aquatic organisms (fish and shellfish) harvested from the water. For waters that are not drinking water sources (e.g., enclosed bays and estuaries), human health NTR and CTR criteria only consider the consumption of contaminated aquatic organisms. The CTR and NTR criteria, along with the beneficial use designations in the Basin Plans and the related implementation policies, are the directly applicable water quality standards for toxic priority pollutants in California waters. (SWRCB, 2016a)

4. 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, pp. 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.

The UWMP Act has been modified over the years in response to the State's water shortages, droughts, and other factors. A substantial amendment was made in 2009, after the drought of 2007-2009. 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, pp. 1-2)

5. 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) For the purposes of SB 610, "project" means any of the following:

- A proposed residential development of more than 500 dwelling units.
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- A proposed hotel or motel, or both, having more than 500 rooms.
- 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.
- A mixed-use project that includes one or more of the projects specified in this subdivision.
- 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)

The Project does not meet the definition of a "project" under SB 610; therefore, a water supply assessment is not required for the Project.

6. 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. The County of San Bernardino's water efficient landscape ordinance is contained in Chapter 83.10 of the County Development Code.

7. 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. (California Water Boards SWRCB, 2019)

8. 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. (California Water Boards SWRCB, 2019)

9. 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, 2018a) 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.
- 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.
- 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.
- 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.
- The CIWMB to review the implementation of each SRRE at least once every two years.

- 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.

Additionally, the IWMA established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities.

10. Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRA) 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 WRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRA 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, 2018b)

11. 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, 2018c)

12. 2016 California Green Building Standards Code (CALGreen, Part 11 of Title 24, California Code of Regulations)

The most recent edition of CALGreen became effective January 1, 2017, 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 § 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.

C. Local Plans, Policies, and Regulations

1. San Bernardino Valley Regional Urban Water Management Plan

The *2015 San Bernardino Valley Regional UWMP* acts as the urban water management plan for the WVWD, is herein incorporated by reference, and is available for public review at 855 W. Baseline Road, Rialto, CA or online at https://wuedata.water.ca.gov/uwmp_plans.asp. The *UWMP* includes a

water system analysis, identifies improvements to correct existing deficiencies and serve projected future growth, and presents the estimated costs and phasing of the recommended improvements. As concluded in the *UWMP*, WVWD anticipates that it will be able to meet projected water demands within its service boundaries until at least the year 2040 in all types of climate situations, including normal, dry, and multiple, consecutive dry weather years (WSC, 2017, Table 11-3 - 11-9).

A Water Shortage Contingency Plan is included in the *UWMP*, which EMWD is to implement in cases of future water deficiencies caused by limitations on supply or the EMWD's delivery system. At the time of long- or short-term drought conditions, or other emergencies, EMWD would inform their customers of the need to conserve water and impose penalties for non-compliance with mandatory water use reductions. Compliance with mandatory water use reductions would ensure that EMWD has the ability to meet present and projected demand within its service area during dry years. (WSC, 2017, p. 11-17)

2. County of San Bernardino Countywide Integrated Waste Management Plan

Per the requirements of the Integrated Waste Management Act, the San Bernardino County Board of Supervisors adopted the County of San Bernardino Countywide Integrated Waste Management Plan (CIWMP), which outlines the goals, policies, and programs the County and its cities implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. (County of San Bernardino, 2018b)

4.14.3 Basis for Determining Significance

The proposed Project would result in a significant impact associated with 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;*

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; or*

e. *Comply with federal, State, and local management and reduction statues and regulations related to solid waste.*

The above-listed thresholds are derived directly from Appendix G to the CEQA Guidelines and address the typical, adverse effects that a development project could have on public utilities and service systems.

4.14.4 IMPACT ANALYSIS

Threshold 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?***

The Project would include the construction of an on-site network of water and wastewater lines that would connect to existing water and wastewater conveyance lines that abut the Project site. No existing water or wastewater lines would be relocated or expanded. The Project would remove existing power poles that abut the Project site along Slover Avenue and Cactus Avenue and would underground the existing overhead power lines. The installation of the infrastructure improvements proposed by the Project Applicant would result in physical environmental impacts; however, these impacts have already been included in the analyses of construction-related effects presented throughout this EIR. In instances where the Project's construction phase would result in specific, significant impacts, mitigation measures are provided in the applicable subsection of this EIR to reduce the Project's effects to less-than-significant levels (or, if it is not possible to reduce the Project's impacts to less-than-significant levels, mitigation is provided to minimize impacts to the maximum level feasible). The construction of infrastructure necessary to serve the proposed Project would not result in any significant physical effects on the environment that are not already identified and disclosed elsewhere in this this EIR. There are no components of the Project's infrastructure improvements that would result in impacts not already disclosed in this EIR and, accordingly, additional mitigation measures beyond those identified throughout this EIR would not be required.

Threshold b:	***Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

WVWD forecasts for projected water demand are based on the population projections of the Southern California Association of Governments (SCAG), which rely on the adopted land use designations contained within the general plans that cover the geographic area within WVWD's service. Because the Project would result in the development of industrial land uses on the Project site, the Project would be inconsistent with the current County of San Bernardino General Plan land use designation for the subject property and, therefore, would be inconsistent with the growth assumptions used by WVWD to calculate its future water service obligations (and would have the potential to exceed WVWD's service capabilities).

As discussed in the *2015 San Bernardino Valley Regional UWMP*, the WVWD has adequate water supplies to meet its current and expected future water service demands until at least 2040 – with a minimum excess supply of 10,151 acre-feet or water per year – under normal, historic single-dry and historic multiple-dry year conditions (WSC, 2017, Tables 11-20, 11-21, and 11-22). The Project is

calculated to consume 29.8 acre-feet of water per year ([26,600 gallons per day x 365 days] ÷ 325,851 gallons per acre-foot), which comprises approximately 0.3% of the excess available water supply for the WVWD. Accordingly, implementation of the Project would not cause the WVWD to be unable to meet the demands of existing and future service obligations during normal, dry and multiple dry years. The Project's impact to water supply would be less than significant.

Threshold 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?***

Wastewater generated by the Project would be treated at the Rialto Wastewater Treatment Plant. Under existing conditions, the Rialto Wastewater Treatment Plant has an excess treatment capacity of approximately 4 million gallons per day, while the Project is conservatively estimated to generate 26,600 gallons of wastewater per day during operation. Implementation of the Project would utilize approximately 0.7% of the daily excess treatment capacity at the Rialto Wastewater Treatment Plant ([26,600 gallons / 4,000,000 gallons per day] x 100% = 0.665%). Accordingly, the Rialto Wastewater Treatment Plant has sufficient capacity to treat wastewater generated by the Project in addition to existing commitments and the Project would not create the need for any new or expanded wastewater facility. Because there is adequate capacity at existing treatment facilities to serve the Project's projected sewer demand, impacts would be less than significant and mitigation is not required.

Threshold 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?***

The Project would be required to comply with mandatory waste reduction requirements of the California Integrated Waste Management Act (AB 939), the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), and the County of San Bernardino Countywide Integrated Waste Management Plan. Notwithstanding, construction and operation of the Project would result in the generation of solid waste requiring disposal at a landfill.

A. Construction Impact Analysis

Construction of the Project would generate solid waste, in the form of demolition debris and remnants of unused construction materials, packing materials, etc.

Approximately 7,076 square feet of existing residential structures and outbuildings would be demolished and removed from the Project site. Using a residential demolition waste generation factor of 50 pounds per square foot (EPA, 2009), demolition of the existing on-site structures would generate approximately 176.9 tons of debris ([7,076 s.f. x 50 lbs/s.f.] ÷ 2,000 lbs/ton = 176.9 tons). AB 939 requires that a minimum of 50% of all solid waste be diverted from landfills (by recycling, reusing, and other waste reduction strategies); therefore, the Project is estimated to generate approximately 88.5 tons of construction demolition waste.

Waste also would be generated by the construction process, primarily consisting of discarded materials and packaging. Based on a proposed building area of 257,855 s.f. and a construction waste generation factor of 4.34 pounds per square foot (EPA, 2009), approximately 559.5 tons of waste would be generated over the course of the Project's construction phase ([257,855 sq. ft. × 4.34 lbs/sq. ft] ÷ 2,000 lbs/ton = 559.5 tons). As mentioned above, AB 939 requires that a minimum of 50% of all solid waste be diverted from landfills (by recycling, reusing, and other waste reduction strategies) consistent with the State's solid waste reduction goals; therefore, the Project is estimated to generate approximately 279.7 tons of construction waste.

The Project's combined demolition and construction activities would generate approximately 368 tons of solid waste requiring disposal at a landfill. The Project's building construction would occur over a period of approximately 280 working days, which corresponds to approximately 1.3 tons of construction waste being generated per day of construction activity.

Non-recyclable demolition debris and construction waste generated by the Project would be disposed at the Mid-Valley Landfill and/or San Timoteo Landfill. The volume of solid waste generated during Project construction would neither exceed State or local disposal standards nor exceed the local infrastructure capacity to handle the waste disposal. As described in Subsection 4.14.1D, the Mid-Valley and San Timoteo Landfils receive well below their maximum permitted daily disposal volume; thus, demolition and construction waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Furthermore, the Mid-Valley and San Timoteo Landfils are not expected to reach their permitted disposal capacity during the Project's construction period. Accordingly, impacts to landfill capacity associated with Project construction activities would be less than significant.

❑ Operational Impact Analysis

Based on a daily waste generation factor of 1.42 pounds of waste per 100 square feet of industrial/warehouse building area obtained from CalRecycle (CalRecycle, 2018d), long-term operation of the Project would generate approximately 3.6 tons of solid waste per day ([257,855 sq. ft. × 1.42 lbs/ 100 sq. ft] ÷ 2,000 lbs/ton = 1.83 tons). A minimum of 50% of all solid waste would be required to be recycled pursuant to AB 939, consistent with the State's solid waste reduction goals; therefore, the Project would generate approximately 0.9 tons per day of solid waste requiring disposal at a landfill.

Non-recyclable waste generated by the Project would be disposed at the Mid-Valley Landfill and/or San Timoteo Landfill. The volume of waste generated during long-term Project operation would neither exceed State or local disposal standards nor exceed the local infrastructure capacity to handle the waste disposal. As described in Subsection 4.14.1D, the Mid-Valley and San Timoteo Landfills receive well below their maximum permitted daily disposal volumes; thus, waste generated by the Project's operation is not anticipated to cause the landfills to exceed their maximum permitted daily disposal volume. Because the Project would generate a relatively small amount of solid waste per

day as compared to the permitted daily capacities at receiving landfills, impacts to regional landfill facilities during the Project's operational activities would be less than significant.

Threshold e: Would the Project comply with federal, state, and local management and reduction statues and regulations related to solid waste?

The California Integrated Waste Management Act (Assembly Bill (AB) 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the San Bernardino County Board of Supervisors adopted the County of San Bernardino Countywide Integrated Waste Management Plan (County of San Bernardino, 2018b), which outlines the goals, policies, and programs the County and its cities implement to create an integrated and cost effective waste management system that complies with the provisions of AB 939 and its diversion mandates.

In order to assist the County of San Bernardino in achieving the mandated goals of the Integrated Waste Management Act, the Project's building occupant(s) would be required to work with future 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 is 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. (CA Legislative Information, 2005) Additionally, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future occupant(s) of the proposed Project would be required to arrange for recycling services, if the occupant generates four (4) or more cubic yards of solid waste per week (CA Legislative Information, 2011). The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant.

4.14.5 Cumulative Impact Analysis

The Project would require water, wastewater, and stormwater drainage services and infrastructure, as well as solid waste disposal for building operation. Development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of infrastructure plans is intended to ensure that adequate public utility 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. Coordination with the utility providers would allow for the provision of utility services to development projects without interrupting or degrading services to existing customers.

The Project and other development projects are subject to connection and service fees to offset increased demand and assist in facility expansion and service improvements (at the time of need). 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, cumulatively considerable impacts to utilities and service systems would not occur.

4.14.6 Significance of Impacts Before Mitigation

Threshold a: Less-than-Significant Impact. The Project's construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, would not cause significant environmental effects.

Threshold b: Less-than-Significant Impact. The WVWD is expected to have sufficient water supplies to service the Project. The Project would not exceed the WVWD's available supply of water during normal years, single-dry years, or multiple-dry years.

Threshold c: Less-than-Significant Impact. The City of Rialto would provide wastewater treatment services to the Project site via the Rialto Wastewater Treatment Plan. This facility has adequate capacity to service the Project.

Threshold d: Less-than-Significant Impact. There is adequate capacity available at the Mid-Valley and San Timoteo Landfills to accept the Project's solid waste during both construction and long-term operation. 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.

Threshold e: Less-then-Significant Impact. The Project would comply with federal, State, and local management and reduction statues and regulations related to solid waste.

4.14.7 Mitigation

Impacts would be less than significant; therefore, mitigation is not required.

5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The CEQA Guidelines require that an EIR disclose the significant environmental effects of a project which cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126(b)). As described in detail in Section 4.0, *Environmental Analysis*, of this EIR, implementation of the proposed Project is anticipated to result in impacts to the environment that cannot be reduced to below a level of significance after implementation of relevant standard conditions of approval, compliance with applicable regulations, and application of feasible mitigation measures. The significant impacts that cannot be mitigated to a level below significant consist of the following:

- Transportation: Project traffic would contribute to LOS deficiencies at six (6) Study Area intersections Opening Year (2020) and Horizon Year (2040) traffic conditions where the County of San Bernardino cannot assure that needed improvements would be in place at the time of need.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

The CEQA Guidelines require EIRs to address any significant irreversible environmental changes that would be involved in the proposed action should it be implemented (CEQA Guidelines § 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).

Determining whether the proposed 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. The consumption of these natural resources would represent an irreversible change to the environment. However, 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., construction aggregates, fossil fuels). Additionally, the Project is required by law to comply with the California Building Standards Code (CALGreen), which will minimize the Project's demand for energy, including energy produced from non-renewable sources. A more detailed discussion of Project energy consumption was previously provided in EIR Subsection 4.5, *Energy*.

Implementation of the Project would commit the Project site to an industrial use as a warehouse facility. The land use proposed by the Project is compatible with the industrial and commercial land uses that are located north and east of the Project site and also compatible with Slover Avenue, which is used as a truck route and abuts the Project site on the north. Although the proposed warehouse use could be perceived to be incompatible with the residential land uses that abut the Project site on the west and south, the Project would not result in any significant and unavoidable local/localized physical impacts to the residential uses. Although the Project would result substantial adverse and unavoidable impacts to transportation, this effect is considered significant due to its effect on the region and not its local impacts to receptors adjacent to 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 County of San Bernardino or City of Rialto General Plans. For this reason, the Project would not result in a significant, irreversible change to nearby, off-site properties.

EIR Subsection 4.8, *Hazards and Hazardous Materials*, 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 Subsection 4.8, 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.

As previously discussed in detail under EIR Subsection 4.5, *Energy*, the Project would not result in a wasteful, inefficient, or unnecessary consumption of energy. Accordingly, the Project would not result in a significant, irreversible change to the environment related to energy use.

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

CEQA requires a discussion of the ways in which the proposed Project could be growth inducing. The 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 (CEQA Guidelines § 15126.2(d)). 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.

Implementation of the Project would contribute to economic growth in the County of San Bernardino; however, growth in the County is not unexpected. According to regional population

projections included in SCAG's *2016 RTP/SCS*, the County of San Bernardino's population is projected to increase 0.54% annually, between 2012 and 2040. Over this same time period, employment in the County is expected to increase 0.59% annually. (Urban Crossroads, 2019f, p. 61) The Project's employees (short-term construction and long-term operational) would purchase goods and services in the region, but any secondary increase in employment associated with meeting these goods and services demands is expected to be marginal, accommodated by existing goods and service providers, and highly unlikely to result in any new physical impacts to the environment based on the amount of existing and planned future commercial and retail services available in areas near the Project site. In addition, the Project would create jobs that a majority of which would likely be filled by residents of the housing units either already built or planned for development within unincorporated County of San Bernardino and nearby incorporated areas. Accordingly, because it is anticipated that most of the Project's future employees would already be living in the Inland Empire area, the Project's introduction of employment opportunities on the Project site would not induce substantial growth in the area.

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 pertinent 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 is in the process of transitioning from agricultural to non-agricultural uses as planned by the County of San Bernardino General Plan, with established residential development to the south and west of the Project site, the Union Pacific Railroad Yard to the north of the Project site, and industrial development to the east of the Project site. Development of the Project site may place short-term development pressure on the undeveloped parcel to the southeast of the Project site; however, because this area is ultimately planned for industrial development by the City of Rialto General Plan, the growth that could occur in the Project area has been planned for to ensure that adequate infrastructure and public services are available. Further, the Project will not require the construction of extensive new oversized public facilities which, if such public facilities were constructed, could induce growth.

Based on the foregoing analysis, the Project would not result in substantial, adverse growth-inducing impacts.

5.4 EFFECTS FOUND NOT TO BE SIGNIFICANT AS PART OF THE INITIAL STUDY PROCESS

CEQA Guidelines § 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."*

The Project's Initial Study, which is included as *Technical Appendix A* to this EIR, determined that implementation of the Project had no potential to result in significant impacts to the areas of agriculture and forestry resources, mineral resources, population/housing, public services, and recreation. Therefore, these issue areas are not required to be analyzed in detail in Section 4.0, *Environmental Analysis*, of this EIR. A brief summary of the Project's impacts to agriculture and forestry resources, mineral resources, population/housing, public services, and recreation is presented below, with a more detailed analysis and reference sources provided in the Project's Initial Study contained in *Technical Appendix A*.

A. Agriculture and Forestry Resources

According to Farmland Mapping and Monitoring Program information available from the California Department of Conservation (DOC), the Project site does not contain any lands mapped by the DOC as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Importance." As such, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

Under existing conditions, the Project site is zoned "Single Residential, one-acre minimum lot size, with Additional Agriculture Overlay (RS-1-AA)." The Project would amend the San Bernardino County's Land Use Zone Map to remove the Additional Agricultural Overlay from the Project site and, therefore, the Project would conflict with existing zoning for an agricultural use. The agricultural value of the Project site was evaluated using the DOC's California Agricultural Land Evaluation and Site Assessment (LESA) Model. The LESA Model is a point-based approach that uses measurable factors to quantify the relative value of agricultural land resources to ultimately determine the significance of agricultural land conversions during the CEQA process. As summarized Table 5-1, *LESA Score Summary*, the Project site's LESA Model score is 36.06; according to the LESA Model scoring thresholds a site scoring less than 39 is not considered to be an important agricultural resource (DOC, 1997, Table 9). Because the Project site is not an active agricultural resource and because the site is not considered to be an important agricultural resource pursuant to the LESA Model, the Project would result in a less-than-significant effect to farmland.

Neither the Project site nor any land in the site's vicinity are under a Williamson Act Contract; therefore, implementation of the Project has no potential to affect land subject to a Williamson Act Contract.

Table 5-1 LESA Score Summary

	Factor Scores	Factor Weight[6]	Weighted Factor Scores
Land Evaluation Factors			
LCC	19.59[1]	0.25	4.90
Storie Index	64.64[2]	0.25	16.16
LE Subtotal		*0.50*	*21.06*
Site Assessment Factors			
Project Size	0[3]	0.15	0
Water Resource Availability	100[4]	0.15	15.00
Surrounding Agricultural Land	0[5]	0.15	0
Protected Resource Land	0[5]	0.05	0
SA Subtotal		*0.50*	*15.00*
Final LESA Score			**36.06**

[1]Approximately 1.15 acres of the Project site has a LCC classification of IIIe, which corresponds to a LESA LCC rating of 70 points, and approximately 12.07 acres of the Project site has a LCC classification of IVe which corresponds to a LCC rating of 50. The remaining 0.05 acres of the Project site does not have a LCC classification. The weighted LCC score for the site is 19.59.

[2]Approximately 0.51 acres of the Project site has a Storie Index rating of 73; approximately 10.80 acres of the Project site has a Storie Index rating of 65; approximately 1.27 acres of the Project site has a Storie Index rating of 54; and approximately 0.64 acres of the Project site has a Storie Index rating of 81. The weighted Storie Index rating for the site is 64.64.

[3]The soils on the Project site do not meet the minimum area requirement (in acres) to be awarded a score under the LESA Model.

[4]The Project site is not irrigated; however, the Project area receives sufficient average annual rainfall to support dryland farming in non-drought years, in theory. Additionally, water utilities are available to the Project site from the abutting roadways (Slover Avenue and Cactus Avenue). The irrigation conditions at the Project site correspond to a score of 100 under the LESA Model.

[5]There are no agricultural lands or protected resource lands within the Project's zone of influence. The zone of influence is defined pursuant to the LESA Model.

[6]Factor weights are defined by the LESA Model.

Source: (DOC, 1997; USDA, n.d.; UC Davis, n.d.)

The Project site is not zoned as forest land, timberland, or Timberland Production, nor is it surrounded by forest land, timberland, or Timberland Production land. Therefore, the Project has no potential to conflict with any areas currently zoned as forest, timberland, or Timberland Production and would not result in the rezoning of any such lands.

The Project site does not contain a forest and is not designated as forest land; thus, the proposed Project would not result in the loss of forest land or the conversion of forest land to non-forest use.

B. Mineral Resources

The Project site is not located within an area known to be underlain by regionally- or locally-important mineral resources or within an area that has the potential to be underlain by regionally- or locally-important mineral resources (DOC, 2008). Accordingly, implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California.

C. Population/Housing

The Project would have a beneficial effect on the County's employment base by developing a site that is currently vacant - except for four (4) single-family residences - with a new warehouse facility. Given that the current unemployment rate for the Riverside-San Bernardino-Ontario area is approximately 4.1%, it is reasonably assured that the jobs created by the Project would be filled by people living within Fontana, Rialto, Colton, Jurupa Valley or other nearby communities. Furthermore, the Project site is served by existing public roadways, and utility infrastructure is already installed beneath the public rights of way that abut the Project site (Slover Avenue and Cactus Avenue). Accordingly, implementation of the Project would not induce direct or indirect substantial growth in the area. Impacts would be less than significant.

Under existing conditions, the Project site contains four (4) single-family residences. The Project would remove these homes from the Project site, but removal of the four (4) residences would not displace substantial numbers of people or substantial numbers of existing housing, considering that there are over 98,072 households in unincorporated San Bernardino County. The removal of four residential homes from the Project site would not necessitate the construction of replacement housing elsewhere. Accordingly, impacts would be less than significant.

D. Public Services

1. Fire Protection Services

The Project would be adequately served by the San Bernardino County Fire Station No. 76, located at 10174 Magnolia St, Bloomington, CA 92316 and San Bernardino County Fire Station No. 77, located at 17459 Slover Avenue. No new or expanded unplanned facilities would be required. The Project is required to comply with the provisions of the County of San Bernardino Fire Protection District Fee Ordinance (Ordinance No. FPD-01), which requires a fee payment that the County applies to the funding of fire protection facilities. Mandatory compliance with Ordinance No. FPD-01 would be required prior to the issuance of a building permit. The Project also would feature a minimum of fire safety and fire suppression activities, including type of building construction, fire sprinklers, a fire hydrant system, and paved access. The proposed building would be of concrete tilt-up construction that contains a low fire hazard risk rating. In addition, a fire alarm system with ceiling mounted fire sprinklers would be installed. Based on the foregoing, the proposed Project would receive adequate fire protection service and would not result in the need for new or physically altered fire protection facilities. Impacts to fire protection facilities would be less than significant.

2. Police Protection Services

The Project would introduce a new warehouse building and employees and visitors 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. Furthermore, property tax revenues generated from development of the site would provide funding to offset potential increases in the demand for police services at Project build-out. Based on the foregoing, the proposed Project would receive adequate police protection service, and would not

result in the need for new or physically altered police protection facilities. Impacts to police protection facilities would therefore be less than significant.

3. Schools

The 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. The proposed Project is not expected to draw a substantial number of new residents to the region and would, therefore, not indirectly generate school-aged students requiring public education. Because the proposed Project would not directly generate students and is not expected to indirectly draw students to the area, the proposed Project would not cause or contribute to a need to construct new or physically altered public school facilities. Although the Project would not create a direct demand for additional public-school services, the Project Applicant would be required to contribute development impact fees to the Colton Joint Unified School District in compliance with California Senate Bill 50 (Greene), which allows school districts to collect fees from new developments to offset the costs associated with increasing school capacity needs. Mandatory payment of school fees would be required prior to the issuance of building permits. Impacts to public schools would be less than significant.

4. Parks

The Project would not create a demand for public park facilities and would not result in the need to modify existing or construct new park facilities. Accordingly, implementation of the Project would not adversely affect any park facility. Thus, no impact would occur.

5. Other Public Services

The Project is not expected to result in a demand for other public facilities/services, including libraries, community recreation centers, post offices, public health facilities, and/or animal shelters. As such, implementation of the Project would not adversely affect other public facilities or require the construction of new or modified public facilities and no impact would occur.

E. Recreation

The Project entails development of the Project site with a warehouse facility. The Project Applicant does not propose 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. The Project also does not entail the construction of any new on- or off-site recreation facilities. Accordingly, implementation of the proposed Project would neither result in the increased use or substantial physical deterioration of an existing neighborhood or regional park nor result in environmental effects related to the construction or expansion of recreational facilities.

F. Wildfire

The Project site is not located in or near a state responsibility area or lands classified as very high fire hazard severity zones (County of San Bernardino, 2010; Cal Fire, 2008); therefore, implementation

of the Project would not exacerbate wildfire hazard risks or expose people or the environment to adverse environmental effects related to wildfires.

6.0 ALTERNATIVES

Pursuant to CEQA Guidelines § 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 proposed Project would result in a significant adverse environmental effect 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: Project traffic would contribute to LOS deficiencies at six (6) Study Area intersections under Opening Year (2020) and Horizon Year (2040) traffic conditions where the County of San Bernardino cannot assure that needed improvements would be in place at the time of need.

6.1 ALTERNATIVES UNDER CONSIDERATION

In compliance with CEQA Guidelines § 15126.6(a), this EIR evaluates "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 following potential alternatives to the Project identified by the County of San Bernardino are summarized below and evaluated throughout this section.

CEQA Guidelines § 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the property in the foreseeable future if the proposed Project were not approved (i.e., "no project" alternative). For projects that include a revision to an existing land use plan, the "no project" alternative is considered to 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 (CEQA Guidelines § 15126(e)(3)(A-B)). Because the proposed Project includes both a land use plan amendment and a site-specific development proposal, this EIR includes two "no project" alternative analyses. The potential scenario where the Project does not proceed is

evaluated as the "No Development Alternative." The potential scenario where the existing land use plan is continued into the future is evaluated as the "No Project Alternative."

6.1.1 No Development Alternative

The No Development Alternative considers no development on the Project site beyond what occurs on the site under existing conditions (as described in EIR Section 2.0). As such, the four (4) single-family residences and associated residential outbuildings on the Project site would remain on the site into the foreseeable future. Under this alternative, no new improvements would be made to the Project site. This alternative was selected by the Lead Agency to compare the environmental effects of the proposed Project with an alternative that would leave the property in its existing state.

6.1.2 No Project Alternative

The No Project Alternative considers re-development of the Project site in accordance with the site's existing land use designation, "Single-Residential (RS-1)," which allows up to 1.0 dwelling units per acre. Accordingly, this alternative considers the potential environmental impacts that would occur where the Project site is developed with 13 single-family residential homes; each home would be developed on a 1-acre lot. This alternative was selected by the Lead Agency to compare the environmental effects of the Project against a development proposal that conforms to the land use standards and development regulations contained within the County of San Bernardino General Plan under the site's existing land use designation.

6.1.3 Trailer Parking Alternative

The Trailer Parking Alternative considers a proposal where the western portion of the Project site (approximately 8 acres) would be re-developed with an approximately 150,000 s.f. warehouse building and the remainder of the Project site (approximately 5 acres abutting the Slover Avenue and Cactus Avenue intersection) would be developed with a truck trailer parking lot. The truck trailer lot provided under this alternative would include approximately 135 trailer parking spaces. This alternative was selected by the Lead Agency to evaluate a scenario that would reduce the total building area on the Project site relative to the proposed Project but still allow productive industrial use of the entire site.

6.2 Alternatives Considered and Rejected

An EIR is required to identify any alternatives that were considered by the Lead Agency but rejected as infeasible. Among the factors described by CEQA Guidelines § 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 proposed Project, CEQA Guidelines § 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.

6.2.1 Alternative Sites

CEQA does not require that an EIR include an analysis of an alternative development site (or sites). 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" (CEQA Guidelines § 15126.6(f)(2)).

Historic activities on the Project site have resulted in pervasive, ongoing disturbance over the last 80+ years. The Project site does not contain any natural/native habitat and contains four occupied residences and associated residential outbuildings. Based on review of aerial photography and the County of San Bernardino General Plan Land Use Map, there are no other available properties in the County of San Bernardino with similar accessibility to the regional goods movement system (see discussion in paragraph below) that are large enough to support the proposed Project that the Project Applicant has the reasonable possibility of controlling and that would have fewer developmental and environmental constraints than the Project site evaluated in this EIR.

Furthermore, development of the Project at an alternative location would result in similar environmental impacts as the Project at is proposed location because the Project's significant and unavoidable impacts are related to vehicles traveling to/from the Project site, and not related to the presence of sensitive resources on the Project site or its location near sensitive receptors. Vehicle-related impacts are a direct reflection of the Project's expected operational characteristics as a warehouse facility, regardless of which property the Project is located. In fact, if an alternative site were selected for the Project that was located farther from major arterial roads that are designated truck routes, like Slover Avenue and Cedar Avenue, for example, or regional freeways like I-10, than is the Project site under consideration, the severity of the Project's air quality and greenhouse gas impacts related to tailpipe emissions (and potentially transportation impacts) would increase as miles traveled for vehicles going to/from the Project would increase.

For these reasons, an alternative sites analysis is not required for the Project.

6.3 ALTERNATIVE ANALYSIS

The following discussion compares the impacts of each alternative considered by the Lead Agency with the impacts that are expected to result from implementation of the proposed Project. A conclusion is provided for each topic as to whether the alternative results in one of the following: (1) reduction or 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, at the end of this section compares the impacts of the alternatives against those of the Project and identifies whether the alternative would meet the basic objectives of the Project. As described in EIR Section 3.0, the Project's basic objectives are:

1. To develop a vacant or underutilized property with an industrial building to help meet the substantial and unmet regional demands for this type of building space.

2. To expand economic development and facilitate job creation in the County of San Bernardino by establishing new industrial development adjacent to or near already-established industrial uses.

3. To attract new businesses to the County of San Bernardino and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.

4. To develop Class A industrial buildings in the County of San Bernardino that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar buildings in the local area and region.

5. To develop a property that has access to available infrastructure, including roads and utilities.

6. To develop an industrial building with loading bays in close proximity to the I-10 Freeway that can be used as part of the southern California goods movement network.

7. To develop light industrial uses in close proximity to designated truck routes and the State highway system to avoid or shorten truck-trip lengths on other roadways.

6.3.1 NO DEVELOPMENT ALTERNATIVE

The No Development Alternative allows decision-makers to compare the environmental impacts of approving the proposed Project to the environmental impacts that would occur if the property were to be left in its existing conditions for the foreseeable future. Under existing conditions, the 13.3-acre Project site is mostly vacant with the exception of four (4) single-family residences – two (2) on the western portion of the site, one (1) at the southeastern corner of the site and one (1) on the northeastern portion of the site – and several associated outbuildings. The entire property is disturbed by on-going homeowner activities and weed abatement (i.e., discing). Refer to the description of the Project site's existing physical conditions in Section 2.0 of this EIR.

A. Aesthetics

The Project site does not contain any unique aesthetic resources, nor does it serve as a prominent scenic vista. Under the No Development Alternative, the visual character and quality of the site would be maintained in its existing condition. No new structures or landscaping would be introduced on the property. The No Development Alternative would not have the potential to conflict with the character or quality of existing and planned development surrounding the Project site and would not create a new source of substantial light or glare that would impact nighttime views in the area. The aesthetic impact of leaving the site in its existing condition would be less than significant. Compared to the Project, this alternative's aesthetics impact would be reduced, although the Project's impacts on aesthetics also are less than significant.

B. Air Quality

Under the No Development Alternative, existing residential uses would remain on the Project site for the foreseeable future and no new sources of air pollution would be introduced on the Project site. Accordingly, all of the construction emissions associated with the Project would be eliminated under the No Development Alternative. The No Development Alternative would generate air pollution from day-to-day tailpipe emissions from residents traveling to and from the Project site; however, the air pollutant emissions from the No Development Alternative would be substantially lower than the emissions that would result from the Project.

C. Biological Resources

The No Development Alternative would leave the property in its existing condition, which would include periodic disturbances related to discing fallow fields (for weed abatement), and other routine, on-site maintenance activities. No grading would occur under this alternative and there would be no potential impacts to special status plants, animals, or sensitive vegetation communities on the Project site. Although mitigation is identified in EIR Subsection 4.3 that would reduce Project-related impacts to biological resources to below a level of significance, implementation of the No Project Alternative would avoid impacts to biological resource associated with the Project and would require no mitigation.

D. Cultural Resources

The No Development Alternative would leave the property in its existing condition, which would include periodic ground disturbances related to discing fallow fields (for weed abatement), and other routine, on-site maintenance activities. No grading would occur under this alternative and there would be no potential impacts to archeological resources that may be buried the ground surface. Therefore, selection of this alternative would avoid all site disturbances on the property and would avoid the potential, albeit remote, for Project construction activities to damage buried prehistoric archaeological resources (which is still a less than significant impact for the proposed Project).

E. Energy

Under the No Development Alternative, no construction activities would occur on-site; therefore, selection of this alternative would avoid the energy use from Project construction. The Project site contains four occupied residences under existing conditions, which consume energy in the form of electricity, natural gas, and gasoline (to power the vehicles on the on-site residents) and this energy use would be expected to occur into the future under this alternative. However, the energy use associated with the No Development Alternative would be substantially lower than the energy demand resulting from operation of the Project, although impacts from both are less than significant.

F. Geology and Soils

The No Development Alternative would leave the property in its existing condition, which would include periodic ground disturbances related to discing fallow fields (for weed abatement), and other routine, on-site maintenance activities; these activities all have the potential to result in water and/or wind erosion that would not occur with the Project. The No Development Alternative would not construct any new structures on the Project site; accordingly, there would be no potential for this alternative to expose people or structures to safety risks associated with geologic or seismic hazards.

G. Greenhouse Gas Emissions

Under the No Development Alternative, existing residential uses would remain on the Project site for the foreseeable future and no new sources of GHG emissions would be introduced on the Project site. The No Development Alternative would generate GHG emissions from day-to-day tailpipe emissions from residents traveling to and from the Project site and from the generation of electricity and natural gas to service the on-site residences; however, the GHG emissions from the No Development Alternative would be substantially lower than the emissions that would result from the Project.

H. Hazards and Hazardous Materials

Because no development would occur under the No Development Alternative, no new hazards would be introduced to the Project site. Routine weed abatement activities would continue to occur on the Project site to remove dry/dead vegetation that has the potential to pose a fire hazard, as required by the County of San Bernardino. Selection of this alternative would reduce the Project's already less-than-significant impacts related to hazards and hazardous materials.

I. Hydrology and Water Quality

No changes to existing hydrology and drainage conditions would occur under the No Development Alternative. No stormwater improvements would be constructed and rainfall would travel across the site as sheet flow, as occurs under existing conditions. However, under this alternative, the stormwater leaving the site would not be treated to minimize waterborne pollutants and would continue to contain sediment and other potential pollutants, as occurs under existing conditions. However, the No Development Alternative would generate fewer sources of potential water-borne pollutants due to the decrease in the amount of building area and number of vehicles on-site.

Compared to the Project, the No Development Alternative would result in a neutral – but less than significant impact – to hydrology and water quality.

J. Land Use and Planning

The No Development Alternative would not result in any new development that would indirectly result in environmental impacts due to a conflict with an existing land use plan. Accordingly, selection of this alternative would result in no impacts to land use and planning.

K. Noise

Under the No Development Alternative, existing residential uses would remain on the Project site for the foreseeable future and no new sources of noise would be introduced on the Project site. Because the property would not be developed and no new traffic trips would be generated, the No Development Alternative would not contribute to an incremental increase in area-wide traffic noise levels. Accordingly, selection of this alternative would result in less-than-significant impacts to noise. Impacts would be reduced compared to the Project, although Project impacts are also less than significant.

L. Transportation

The No Development Alternative would continue to generate traffic from residents traveling to and from the Project site; however, this traffic is minimal and not expected to result in adverse impacts to the local or regional transportation network. Accordingly, this alternative would avoid all of the Project's impacts to transportation.

M. Tribal Cultural Resources

The No Development Alternative would leave the property in its existing condition, which would include periodic ground disturbances related to discing fallow fields (for weed abatement) and other routine maintenance activities. No grading would occur under this alternative and there would be no potential impacts to tribal cultural resources that may be buried beneath the ground surface. Selection of this alternative would avoid all new disturbances on the property and would avoid the potential, albeit remote, for Project construction activities to damage buried tribal resources, although Project impacts are also less than significant.

N. Utilities and Service Systems

No additional domestic water, sewer, or stormwater drainage facilities would be needed for the No Development Alternative, and there would be no change in the demand for domestic water or waste water treatment services as compared to existing conditions. Also, this alternative would not result in the Project's increased demand for solid waste collection and disposal. Selection of this alternative would avoid all of the Project's impacts to utilities and service system providers.

O. *Conclusion*

Implementation of the No Development Alternative would not result in any environmental impacts beyond those that have historically occurred on the Project site. All significant effects of the proposed Project would be avoided by the selection of this alternative. Because this alternative would avoid all of the Project's environmental impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to 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. The Trailer Parking Alternative, as described in Subsection 6.3.3, is identified as the environmentally superior alternative.

The No Development Alternative would not meet any of the Project's objectives.

6.3.2 No Project Alternative

The No Project Alternative would re-develop the Project site with 13 detached single-family homes on approximately 1-acre lots. The No Project Alternative would be consistent with the Project site's "Single Residential (RS-1)" land use designation from the County of San Bernardino General Plan, which allows single-family residential development on the Project site at a maximum density of 1.0 dwelling units per acre. This alternative would not require a General Plan Amendment (which is required for the Project).

A. *Aesthetics*

The No Project Alternative would construct detached single-family homes on the Project site as compared to the industrial warehouse facility and associated improvements proposed by the Project. The No Project Alternative would be visually compatible with the existing residential land uses located west and south of the Project site. The No Project Alternative would not result in a significant adverse effect related to visual character or quality, which is the same conclusion drawn for the Project. Compared to the Project, impacts would be reduced under this alternative, although Project impacts would be less than significant.

B. *Air Quality*

The No Project Alternative would result in construction activities across the entire Project site, similar to the Project. The demolition, site preparation, and grading activities required for the No Project Alternative would be similar to the proposed Project would require the same mitigation required for the Project. However, the No Project Alternative is expected to result in the construction of less building area than the Project and also would result in reduced paving activities as compared to the Project; therefore, this alternative is expected to result in reduced air pollutant emissions during physical construction activities relative to the Project.

Because the No Project Alternative would develop the Project site with land uses that are not expected to generate or attract as much traffic as the Project (and would avoid all of the Project's

heavy-duty truck traffic), this alternative is expected to reduce criteria pollutant emissions during operations relative to the Project. This alternative is expected to reduce the Project's less-than-significant impact during operations related to NOx emissions. Also, this alternative would eliminate the Project's less-than-significant contribution to local excess carcinogenic and non-carcinogenic health risk hazards due to the elimination of heavy-duty truck traffic that emits diesel particulate matter at the Project site.

Like the Project, the No Project Alternative would generate odors during short-term construction activities (e.g., diesel equipment exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Long-term operation of this alternative would not create objectionable odors affecting a substantial number of people and impacts would be less than significant with compliance with mandatory regulatory requirements.

C. Biological Resources

The No Project Alternative would develop the entire Project site and would result in identical impacts to biological resources as the Project. The No Project Alternative would require similar mitigation as the proposed Project and, after mitigation, both the No Project Alternative and the proposed Project would result in less-than-significant impacts to biological resources.

D. Cultural Resources

The No Project Alternative would develop the entire Project site and would result in identical impacts to cultural resources as the Project. The No Project Alternative would require similar mitigation as the proposed Project and, after mitigation, both the No Project Alternative and the proposed Project would result in less-than-significant impacts to cultural resources.

E. Energy

Because the No Project Alternative would result in less building intensity than the proposed Project and would reduce the energy-intensity of site operations, the No Project Alternative is expected to require less energy to construct and operate than the Project and, therefore, result in a reduction of energy usage as compared to the proposed Project. Additionally, because the No Project Alternative would generate fewer daily vehicle trips than the Project, this alternative would result in a lower demand for transportation energy resources than the Project. Notwithstanding, like the Project, the No Project Alternative would result in a less-than-significant impact.

F. Geology and Soils

This alternative would disturb the same physical area as the Project and would, therefore, have the same potential for soil erosion during the construction phase as the Project. Soil erosion impacts would be less than significant under both the Project and this alternative due to mandatory compliance with federal, State, and local water quality standards. The No Project Alternative would be required to comply with the same mandatory regulatory requirements as the Project to preclude

substantial hazards associated with seismic ground shaking. The No Project Alternative would result in a similar, less-than-significant impact to geology and soils as the Project.

G. Greenhouse Gas Emissions

Because the No Project Alternative would result in less building area than the Project, the No Project Alternative is expected to require less energy to construct and operate than the Project and, therefore, result in a reduction of non-mobile source GHG emissions as compared to the Project. Additionally, the No Project Alternative would generate fewer daily vehicle trips than the Project and would reduce the amount of mobile source GHG emissions. Like the proposed Project, the No Project Alternative would result in a less-than-significant impact.

H. Hazards and Hazardous Materials

Neither implementation of the No Project Alternative nor the proposed Project would result in a significant impact related to hazards or hazardous materials, although impacts under this alternative would be reduced compared to the Project. Land uses that would occur on-site under the No Project Alternative would have a lesser potential to handle and store hazardous materials than the proposed Project. With mandatory regulatory compliance, both the No Project Alternative and the proposed Project would pose a less-than-significant hazard to the public or the environment related to the use, handling, storage, and/or transport of hazardous materials.

I. Hydrology and Water Quality

Neither the Project nor the No Project Alternative would result in substantial alterations to the drainage pattern of the site or would result in substantial erosion effects. Accordingly, implementation of the Project and the No Project Alternative would both result in less-than-significant impacts to existing drainage patterns.

During construction, potential hydrology and water quality effects on the Project site would be similar under both the No Project Alternative and the Project due to this alternative and the Project both disturbing the same physical area. Like the Project, the No Project Alternative would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) to ensure that stormwater runoff during construction does not contain substantial pollutant concentrations. Both the Project and the No Project Alternative would result in less-than-significant construction impacts to hydrology and water quality.

In the long-term, potential hydrology and water quality effects on the Project site would be similar under both the No Project Alternative and the Project. Like the proposed Project, the No Project Alternative would be required to implement a drainage plan to ensure that stormwater runoff is conveyed to local and regional stormwater drainage facilities with adequate capacity to handle runoff flows from the Project site. Additionally, like the proposed Project, the No Project Alternative would be required to implement a long-term WQMP to ensure that stormwater runoff leaving the site does not contain substantial pollutant concentrations. Both the proposed Project and the No Project Alternative would result in less-than-significant operational impacts to hydrology and water quality.

J. Land Use and Planning

The No Project Alternative would develop the Project site in accordance with the County of San Bernardino General Plan. As such, there would be no conflicts with applicable land use plans, policies, or regulations resulting in significant environmental effects. Comparatively, the Project proposes a General Plan Amendment to address consistency between the proposed land uses and the General Plan, although the end result is that the Project is also consistent with all applicable land use plans, policies, and regulations. Both the No Project Alternative and the Project would result in less-than-significant land use and planning impacts.

K. Noise

Noise associated with this alternative would occur during short-term construction activities and under long-term operation. Under both the construction and operational scenarios, the No Project Alternative is expected to reduce the Project's less-than-significant noise impacts due to the decrease in the intensity of construction and operational activities on-site as well as a decrease in the amount of traffic traveling to and from the Project site.

L. Transportation

The No Project Alternative would generate substantially less daily and peak hour traffic than the proposed Project and, therefore, would reduce the severity of impacts to study area intersections and roadway segments compared to the Project. As a result of the reduction in traffic, the No Project Alternative likely would avoid all of the Project's cumulatively-considerable unavoidable transportation impacts. The No Project Alternative would require the same mitigation as the Project (payment of DIF fees) to mitigate its cumulatively-considerable impacts to the transportation network. After mitigation, the No Project Alternative would have less-than-significant impacts, while in comparison the Project would result in an unavoidable significant cumulatively-considerable impact to six intersections.

M. Tribal Cultural Resources

The No Project Alternative would develop the entire Project site and would result in identical impacts to tribal cultural resources as the Project. The No Project Alternative would require similar mitigation as the proposed Project and, after mitigation, both the No Project Alternative and the proposed Project would result in less-than-significant impacts to tribal cultural resources.

N. Utilities and Service Systems

Like the proposed Project, the No Project Alternative would result in a demand for public utility and service systems and would result in the construction of domestic water, sewer, and stormwater drainage improvements. The No Project Alternative would result in a demand for domestic water, waste water treatment services, and solid waste collection and disposal services that is higher than what occurs at the Project site under existing conditions; but this alternative's overall demand would be less than the Project's demand for the same services. Impacts would be less than significant.

O. *Conclusion*

The No Project Alternative would avoid the Project's cumulatively considerable impacts to transportation; but, would result in the same significant construction air quality impact as the Project. The No Project Alternative also would reduce the Project's less-than-significant impacts to aesthetics, air quality (construction), energy, greenhouse gas emissions, hazards and hazardous materials, noise, and utilities and service systems.

Because this alternative would avoid or reduce the Project's significant environmental impacts, it warrants consideration as the "environmentally superior alternative." However, pursuant to 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. The Trailer Parking Alternative, as described in Subsection 6.3.3, is identified as the environmentally superior alternative.

The No Project Alternative would fail to meet the Project's objectives, with the exception of Objective 5.

6.3.3 TRAILER PARKING ALTERNATIVE

The Trailer Parking Alternative provides for the development of the Project site with an approximately 150,000 s.f. warehouse building with similar site layout/orientation, architectural style, landscaping, utility improvements to the warehouse building proposed by the Project. The Trailer Parking Alternative also provides for the development of an approximately 5-acre trailer parking lot on the eastern portion of the Project site, abutting the Slover Avenue/Cactus Avenue intersection. The parking lot would provide approximately 135 truck trailer parking spaces. The Trailer Parking Alternative would provide landscaping and solid screening walls abutting Slover Avenue and Cactus Avenue to hide the trailer lot from public view.

The Trailer Parking Alternative was selected to evaluate the environmental impacts associated with a development scenario that would reduce the total building floor area on-site (thereby shortening the construction period and reducing long-term demands for energy resources) but still develop the entire site with productive industrial land uses. Furthermore, the truck trailer parking lot would complement the warehouse building on the Project site and could, possibly, support future site operations as some logistics warehouse operators require additional parking spaces for truck trailers to support their business operations.

A. *Aesthetics*

Under the Trailer Parking Alternative, the western portion of the site would contain the warehouse facility and the eastern portion of the site would contain the trailer parking lot. The trailer parking lot would feature tall (approx. 10-14 feet tall) solid screen walls and dense landscaping abutting Slover Avenue and Cactus Avenue. Although the tall screen walls for the trailer parking lot would contrast with the existing visual environment along Slover Avenue and Cactus Avenue to a greater degree than the Project, this alternative would not be incompatible with the surrounding area or visually

offensive. Overall, the Trailer Parking Alternative's effect on aesthetics would be similar to the Project and impacts would be less than significant.

B. Air Quality

Under this alternative, the overall duration of construction would be reduced as compared to the proposed Project, due to the reduction of approximately 107,855 s.f. of building area. As such, the total amount of air pollutant emissions generated during the construction phase would be reduced under this alternative as compared to the Project. However, the daily intensity of construction activities on the subject property would be similar under both this alternative and the proposed Project because the same physical area would be disturbed under the Project and this alternative. Therefore, the total daily emissions during the construction phase would be similar as Project-related development. As with the proposed Project, this alternative would require mitigation to reduce localized emissions of $PM_{2.5}$ during site preparation activities. Construction-related impacts under the Trailer Parking Alternative and the Project both would be reduced to less-than-significant levels.

Because the Trailer Parking Alternative would result in less building floor area than the Project, the Trailer Parking Alternative is expected to require less energy to operate than the Project and, therefore, would result in a reduction of non-mobile source air quality emissions as compared to the Project. However, the Trailer Parking Alternative is expected to increase the total number of heavy trucks traveling to and from the Project site as it is expected there would be significant daily turnover of the 135 trailer parking spaces provided by this alternative (either to support on-site warehouse operations or as a "drop lot" for other nearby warehouse facilities). The increase in heavy truck activity on the Project site would increase daily mobile source emissions as compared to the Project and also would increase carcinogenic and non-carcinogenic health hazards from diesel emissions as compared to the Project.

Like the Project, the Trailer Parking Alternative would generate odors during short-term construction activities (e.g., diesel equipment exhaust, architectural coatings, asphalt) and long-term operation (e.g., diesel exhaust). However, and similar to the Project, these odors would occur intermittently, be of short-term duration, and would not be substantial. Long-term operation of this alternative would not create objectionable odors affecting a substantial number of people and impacts would be less than significant with compliance with mandatory regulatory requirements.

C. Biological Resources

The Trailer Parking Alternative would develop the entire Project site and would result in identical impacts to biological resources as the Project. The Trailer Parking Alternative would require similar mitigation as the Project and, after mitigation, both the Trailer Parking Alternative and the Project would result in less-than-significant impacts to biological resources.

D. Cultural Resources

The Trailer Parking Alternative would develop the entire Project site and would result in identical impacts to cultural resources as the Project. The Trailer Parking Alternative would require similar

mitigation as the Project and, after mitigation, both the Trailer Parking Alternative and the Project would result in less-than-significant impacts to cultural resources.

E. Energy

Because the Trailer Parking Alternative would result in less building floor area than the Project, the Trailer Parking Alternative is expected to require slightly less energy to construct and operate than the Project and, therefore, would result in a reduction of energy usage as compared to the Project. The Trailer Parking Alternative would generate a similar or greater amount of daily vehicle trips than the Project, depending on the end use of the trailer lot, and would have the potential to increase the amount of transportation energy demands. Notwithstanding, the Trailer Parking Alternative would result in a less-than-significant impact, which is the same conclusion drawn for the Project.

F. Geology and Soils

This alternative would disturb the same physical area as the Project and would, therefore, have the same potential for soil erosion during the construction phase as the Project. Soil erosion impacts would be less than significant under both the Project and this alternative due to mandatory compliance with federal, State, and local water quality standards. The Trailer Parking Alternative would be required to comply with the same mandatory regulatory requirements as the Project to preclude substantial hazards associated with seismic ground shaking and geologic hazards. The Trailer Parking Alternative would result in a similar, less-than-significant impact to geology and soils as the Project.

G. Greenhouse Gas Emissions

Because the Trailer Parking Alternative would result in less building floor area than the Project, the Trailer Parking 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. However, the Trailer Parking Alternative would likely generate more mobile source GHG emissions than the Project due to an expected increase in heavy truck activity at the Project site. The increase in mobile source GHG emissions under this alternative is expected to outweigh the emissions savings that would occur from developing a smaller building and, likely, would result in a significant impact that would not occur with the proposed Project.

H. Hazards and Hazardous Materials

Neither implementation of the Trailer Parking Alternative nor the Project would result in a significant impact related to hazards or hazardous materials. Land uses that would occur on-site under the Trailer Parking Alternative would have a similar potential to handle and store hazardous materials than the Project. With mandatory regulatory compliance, both the Trailer Parking Alternative and the Project would pose a less-than-significant hazard to the public or the environment related to the use, handling, storage, and/or transport of hazardous materials.

I. Hydrology and Water Quality

Neither the Project nor the Trailer Parking Alternative would result in substantial alterations to the drainage pattern of the site or would result in substantial erosion effects. Accordingly, implementation of the Project and the Trailer Parking Alternative would both result in less-than-significant impacts to existing drainage patterns.

During construction, potential hydrology and water quality effects on the Project site would be similar under both the Trailer Parking Alternative and the Project due to this alternative and the Project both disturbing the same physical area. Like the Project, the Trailer Parking Alternative would be required to implement a SWPPP to ensure that stormwater runoff during construction does not contain substantial pollutant concentrations. Both the Project and the Trailer Parking Alternative would result in less-than-significant construction impacts to hydrology and water quality.

In the long-term, potential hydrology and water quality effects on the Project site would be similar under both the Trailer Parking Alternative and the Project due to this alternative and the Project both providing a similar amount of non-pervious surfaces. Like the Project, the Trailer Parking Alternative would be required to implement a drainage plan to ensure that stormwater runoff is conveyed to local and regional stormwater drainage facilities with adequate capacity to handle runoff flows from the Project site. Additionally, like the Project, the Trailer Parking Alternative would be required to implement a long-term WQMP to ensure that stormwater runoff leaving the site does not contain substantial pollutant concentrations. Both the Project and the Trailer Parking Alternative would result in less-than-significant operational impacts to hydrology and water quality.

J. Land Use and Planning

Both this alternative and the Project would require a General Plan to develop the subject property with industrial land uses. Both the Trailer Parking Alternative and the Project would result in less-than-significant land use and planning impacts.

K. Noise

Noise associated with this alternative would occur during short-term construction activities and under long-term operation. The types of daily construction activities conducted on the site would be similar (and less than significant) under both the Trailer Parking Alternative and the Project, although the length of construction activities would be slightly decreased under this alternative as less building floor area would be constructed on-site. Therefore, it is anticipated that the total duration of noise impacts during the building construction phase would be slightly decreased under this alternative as compared to the proposed Project and impacts would be less than significant. Under long-term operational conditions, noise impacts from operations on the Project site (i.e., stationary noise) would be similar (and less than significant) relative to the Project due to relatively similar operational practices (i.e., cargo loading/unloading activities); however, off-site traffic noise could increase due to a higher volume of heavy truck traffic.

L. Transportation

The Trailer Parking Alternative is expected to reduce the amount of peak hour traffic compared to the proposed Project. Under this alternative, using the trip generation rate and trip distribution percentages used for the Project, the Project's cumulatively considerable impacts at Intersections #8 and #12 would be avoided. All other traffic impacts would be reduced relative to the Project, but not avoided, and would require similar mitigation as the Project.

M. Tribal Cultural Resources

The Trailer Parking Alternative would develop the entire Project site and would result in identical impacts to tribal cultural resources as the Project. The Trailer Parking Alternative would require similar mitigation as the Project and, after mitigation, both the Trailer Parking Alternative and the Project would result in less-than-significant impacts to tribal cultural resources.

N. Utilities and Service Systems

Due to a reduced building area, the Trailer Parking Alternative is expected to have a reduced demand for utilities and services systems, including water, sewer, stormwater drainage service/facilities, and solid waste collection and disposal, as compared to the Project. However, as with the Project, the Trailer Parking Alternative is expected to result in a less-than-significant impact to utilities and services systems.

O. Conclusion

The Trailer Parking Alternative would avoid the Project's cumulatively considerable transportation impact at two (2) intersections and would reduce the severity – but not avoid – the Project's significant and unavoidable impacts at all other impacted Study Area intersections. As compared to the Project, this alternative is expected to increase mobile source air pollutant emissions, including increasing carcinogenic and non-carcinogenic health risk hazards from diesel emissions, and, also, would result in a significant greenhouse gas emissions impact that would not occur under the Project. The Trailer Parking Alternative would slightly reduce the Project's less-than-significant impacts to energy and utilities and service systems; impacts to all other environmental topic areas would be similar to the Project. This alternative is identified as the environmentally superior alternative.

The Trailer Parking Alternative would potentially and partially meet all Project objectives; but, would be less effective than the Project in achieving Objectives 1, 2, 3, 4, and 6 because the reduced building floor area provided by this objective would provide fewer business opportunities and would generate fewer jobs in the County of San Bernardino.

Table 6-1 Alternatives to the Proposed Project – Comparison of Environmental Impacts

Environmental Topic	Proposed Project Significance of Impacts After Mitigation	Level of Impact Compared to the Proposed Project		
		No Development Alternative	No Project Alternative	Trailer Parking Alternative
Aesthetics	Less-than-Significant Impact	Reduced	Reduced	Similar
Air Quality	Less-than-Significant Impact	Reduced	Reduced	Increased
Biological Resources	Less-than-Significant Impact	Reduced	Similar	Similar
Cultural Resources	Less-than-Significant Impact	Reduced	Similar	Similar
Energy	Less-than-Significant Impact	Reduced	Reduced	Reduced
Geology and Soils	Less-than-Significant Impact	Increased	Similar	Similar
Greenhouse Gas Emissions	Less-than-Significant Impact	Reduced	Reduced	Increased
Hazards and Hazardous Materials	Less-than-Significant Impact	Reduced	Reduced	Similar
Hydrology and Water Quality	Less-than-Significant Impact	Increased	Similar	Similar
Land Use and Planning	Less-than-Significant Impact	Reduced	Reduced	Similar
Noise	Less-than-Significant Impact	Reduced	Reduced	Mixed
Transportation	Significant and Unavoidable Impact	Reduced	Reduced	Reduced
Tribal Cultural Resources	Less-than-Significant Impact	Increased	Similar	Similar
Utilities and Service Systems	Reduced	Reduced	Reduced	Reduced
Ability to Meet the Basic Objectives of the Project				
Objective 1: To develop a vacant or underutilized property with an industrial building to help meet the substantial and unmet regional demands for this type of building space.		No	No	Yes, but less effectively than the Project
Objective 2: To expand economic development and facilitate job creation in the County of San Bernardino by establishing new industrial development adjacent to or near already-established industrial uses.		No	No	Yes, but less effectively than the Project

Table 6-1 Alternatives to the Proposed Project – Comparison of Environmental Impacts

Objective 3: To attract new businesses to the County of San Bernardino and thereby provide a more equal jobs-housing balance in the Inland Empire area that will reduce the need for members of the local workforce to commute outside the area for employment.	No	No	Yes, but less effectively than the Project
Objective 4: To develop Class A industrial buildings in the County of San Bernardino that are designed to meet contemporary industry standards, can accommodate a wide variety of users, and are economically competitive with similar buildings in the local area and region.	No	No	Yes, but less effectively than the Project
Objective 5: To develop a property that has access to available infrastructure, including roads and utilities.	No	Yes	Yes
Objective 6: To develop an industrial building with loading bays in close proximity to the I-10 Freeway that can be used as part of the southern California goods movement network.	No	No	Yes, but less effectively than the Project
Objective 7: To develop light industrial uses in close proximity to designated truck routes and the State highway system to avoid or shorten truck-trip lengths on other roadways.	No	No	Yes

7.0 REFERENCES

7.1 PERSONS INVOLVED IN THE PREPARATION OF THIS EIR

7.1.1 COUNTY OF SAN BERNARDINO

Aron Liang, Senior Planner

7.1.2 T&B PLANNING, INC.

Tracy Zinn, AICP, Principal
B.S. Regional Planning and Geography

David Ornelas, Senior Project Manager
B.A. Urban Studies and Planning

Eric Horowitz, Senior IT/GIS/Graphics Manager
Degrees: B.A. Urban and Regional Planning; M.S. Geographic Information Systems
Certifications; Geographic Information Systems Professional (GISP)

Lauren Fujimori, Environmental Analyst
B.S. Environmental Systems

7.2 DOCUMENTS INCORPORATED BY REFERENCE IN THIS EIR

The following reports, studies, and supporting documentation were used in the preparation of this EIR and are incorporated by reference within this EIR. A copy of the following reports, studies, and supporting documentation is a matter of public record and is generally available to the public at the location listed.

San Bernardino, County of. *Final Environmental Impact Report San Bernardino County 2007 General Plan Program SCH #2005101038*. February 2007. Available on-line at: http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf. Accessed February 18, 2019.

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7.3 TECHNICAL APPENDICES

The following reports, studies, and supporting documentation were used in preparing the Slover/Cactus Avenue Warehouse EIR and are bound separately as Technical Appendices. A copy of the Technical Appendices is available for review at the County of San Bernardino, Land Use Services Department, Planning Division, 385 North Arrowhead Avenue, San Bernardino, CA 92415.

Appendix A: Initial Study for Slover/Cactus Avenue Warehouse, Notice of Preparation, and Written Comments

Appendix B1: Urban Crossroads, 2019a. *Slover and Cactus Warehouse Air Quality Impact Analysis*. April 26, 2019.

Appendix B2: Urban Crossroads, 2019b. *Slover and Cactus Warehouse Mobile Source Health Risk Assessment.* April 26, 2019.

Appendix B3: Urban Crossroads, 2019c. *Slover and Cactus Warehouse Supplemental Air Quality Assessment.* April 26, 2019.

Appendix C: L&L Environmental, 2018a. *Biological Assessment, Special Status Botanical Survey, and Breeding Season Burrowing Owl Survey for the Slover and Cactus Warehouse Project*. September 2018.

Appendix D: L&L Environmental, 2018b. *Phase 1 Cultural Resources Assessment for the Slover and Cactus Avenues Warehouse Project*. June 14, 2018.

Appendix E: Urban Crossroads, 2019d. *Slover and Cactus Warehouse Energy Analysis*. April 26, 2019.

Appendix F1: Norcal Engineering, 2017a. *Geotechnical Investigation Proposed Warehouse Development Southwest Corner of Slover Avenue and Cactus Avenue*. September 6, 2017.

Appendix F2: Norcal Engineering, 2017b. *Soil Infiltration Study – Proposed Warehouse Development – Located at the Southwest Corner of Slover Avenue and Cactus Avenue*. September 7, 2017.

Appendix G: Urban Crossroads, 2019e. *Slover and Cactus Warehouse Greenhouse Gas Analysis*. April 26, 2019.

Appendix H: SCS Engineers, 2017. *Phase I Environmental Site Assessment 13.24-Acre Site Located at Slover Avenue and South Cactus Avenue*. August 13, 2017.

Appendix I1: Thienes Engineering, 2018. *Preliminary Hydrology Calculations for Alere Slover and Cactus*. June 11, 2018.

Appendix I2: Thienes Engineering, 2017. *Preliminary Water Quality Management Plan (WQMP) for Alere Slover and Cactus*. September 6, 2017.

Appendix J: Urban Crossroads, 2019f. *Slover and Cactus Warehouse Noise Impact Analysis*. May 17, 2019.

Appendix K: Urban Crossroads, 2019g. *Slover and Cactus Warehouse Traffic Impact Analysis*. May 16, 2019.

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